Flexion Therapeutics Inc
Form 10-Q
November 06, 2017
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UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-Q

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
FOR THE QUARTERLY PERIOD ENDED SEPTEMBER 30, 2017

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
FOR THE TRANSITION PERIOD FROM TO

Commission file number: 001-36287

Flexion Therapeutics, Inc.

(Exact name of registrant as specified in its charter)

Delaware	26-1388364
(State or Other Jurisdiction of	(I.R.S. Employer
Incorporation or Organization)	Identification No.)
10 Mall Road, Suite 301	
Burlington, Massachusetts	01803

(Address of Principal Executive Offices) (Zip Code)

(781) 305-7777

(Registrant's Telephone Number, Including Area Code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer", "accelerated filer", "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

As of October 31, 2017 the registrant had 37,540,829 shares of Common Stock ($0.001 par value) outstanding.

FLEXION THERAPEUTICS, INC.

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

Flexion Therapeutics, Inc.

Condensed Consolidated Balance Sheets

(Unaudited in thousands, except share amounts)

	September 30, 2017	December 31, 2016
Assets		
Current assets:		
Cash and cash equivalents	$159,179	$30,915
Marketable securities	175,921	174,688
Prepaid expenses and other current assets	3,609	3,790
Total current assets	$338,709	$209,393
Property and equipment, net	11,481	11,664
Long-term investments	—	4,725
Restricted cash	600	480
Total assets	$350,790	$226,262
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$3,960	$2,161
Accrued expenses and other current liabilities	12,276	6,245
Current portion of long-term debt	9,967	9,134
Total current liabilities	$26,203	$17,540
Long-term debt, net	15,260	21,399
2024 convertible notes, net	135,275	-
Other long-term liabilities	399	291
Total liabilities	$177,137	$39,230
Commitments and contingencies		
Preferred stock, $0.001 par value; 10,000,000 shares authorized at September 30, 2017 and December 31, 2016 and 0 shares issued and outstanding at September 30, 2017 and December 31, 2016	—	—
Stockholders' equity:		
Common stock, $0.001 par value; 100,000,000 shares authorized; 31,983,903 and 31,667,469 shares issued and outstanding, at September 30, 2017 and December 31, 2016, respectively	32	32
Additional paid-in capital	472,322	398,757
Accumulated other comprehensive loss	(62)	(71)
Accumulated deficit	(298,639)	(211,686)

Total stockholders' equity	173,653	187,032
Total liabilities and stockholders' equity	$350,790	$226,262

The accompanying notes are an integral part of these condensed consolidated financial statements.

Flexion Therapeutics, Inc.

Condensed Consolidated Statements of Operations and Comprehensive Loss

(Unaudited in thousands, except per share amounts)

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2017	2016	2017	2016
Revenue	$—	$—	$—	$—
Operating expenses:				
Research and development	12,846	9,047	35,371	29,933
General and administrative	18,375	8,388	46,533	18,295
Total operating expenses	31,221	17,435	81,904	48,228
Loss from operations	(31,221)	(17,435)	(81,904)	(48,228)
Other income (expense):				
Interest income	1,095	421	2,450	1,052
Interest expense	(3,843)	(561)	(7,363)	(1,039)
Other expense	(219)	(207)	(136)	(567)
Total other income (expense)	(2,967)	(347)	(5,049)	(554)
Net loss	$(34,188)	$(17,782)	$(86,953)	$(48,782)
Net loss per share basic and diluted	$(1.07)	$(0.65)	$(2.73)	$(2.04)
Weighted average common shares outstanding, basic and diluted	31,931	27,524	31,821	23,938
Other comprehensive income (loss):				
Unrealized gains (losses) from available-for-sale securities, net of tax of $0	18	38	9	(70)
Total other comprehensive income (loss)	18	38	9	(70)
Comprehensive loss	$(34,170)	$(17,744)	$(86,944)	$(48,852)

The accompanying notes are an integral part of these condensed consolidated financial statements.

Flexion Therapeutics, Inc.

Condensed Consolidated Statements of Changes in Stockholder's Equity (Deficit)

(Unaudited in thousands)

	Common Stock					
	Shares	Par Value	Additional Paid-in-Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholder's Equity (Deficit)
Balance at December 31, 2014	21,440	$ 21	$ 238,402	$ (5)	$ (93,477)	$ 144,941
Exercise of stock options	109	1	592			$ 593
Employee Stock Purchase Plan	21	—	276			276
Stock-based compensation expense			4,583			4,583
Net loss					(46,315)	(46,315)
Other comprehensive loss				(92)		(92)
Balance at December 31, 2015	21,570	$ 22	$ 243,853	$ (97)	$ (139,792)	$ 103,986
Issuance of Common Stock net of issuance costs	10,040	10	147,491			147,501
Exercise of stock options	30	-	167			167
Employee Stock Purchase Plan	27	—	476			476
Stock-based compensation expense			6,770			6,770
Net loss					(71,894)	(71,894)
Other comprehensive income				26		26
Balance at December 31, 2016	31,667	$ 32	$ 398,757	$ (71)	$ (211,686)	$ 187,032
Exercise of stock options	261	—	3,076			$ 3,076
Employee Stock Purchase Plan	56	—	453			453
Stock-based compensation expense			7,570			7,570
Convertible debt			62,466			62,466
Net loss					(86,953)	(86,953)
Other comprehensive income				9		9
Balance at September 30, 2017	31,984	$ 32	$ 472,322	$ (62)	$ (298,639)	$ 173,653

The accompanying notes are an integral part of these condensed consolidated financial statements.

Flexion Therapeutics, Inc.

Condensed Consolidated Statements of Cash Flows

(Unaudited in thousands)

	Nine Months Ended September 30,	
	2017	2016
Cash flows from operating activities		
Net loss	$(86,953)	$(48,782)
Adjustments to reconcile net loss to cash used in operating activities:		
Depreciation	1,456	700
Stock-based compensation expense	7,570	4,963
Amortization of premium (discount) on marketable securities	355	544
Loss on disposal of fixed assets	—	2,278
Amortization of convertible debt discount and debt issuance costs	2,985	26
Premium paid on securities purchased	(676)	(273)
Changes in operating assets and liabilities:		
Accounts receivable	—	95
Prepaid expenses, other current and long-term assets	181	(697)
Accounts payable	2,020	(1,029)
Accrued expenses and other current and long-term liabilities	7,124	690
Net cash used in operating activities	(65,938)	(41,485)
Cash flows from investing activities		
Purchases of property and equipment	(1,882)	(8,165)
Change in restricted cash	(120)	—
Purchases of marketable securities	(199,756)	(80,134)
Sale and redemption of marketable securities	203,578	40,897
Net cash provided by investing activities	1,820	(47,402)
Cash flows from financing activities		
Proceeds from the issuance of 2024 convertible notes	201,250	—
Payment of debt issuance costs	(6,470)	(42)
Proceeds from issuance of notes payable	—	15,000
Proceeds from the offering of common stock	—	77,644
Payments on notes payable	(5,833)	—
Payments of public offering costs	(95)	(256)
Proceeds from the exercise of stock options	3,077	166
Proceeds from Employee Stock Purchase Plan	453	240
Net cash provided by financing activities	192,382	92,752
Net increase in cash and cash equivalents	128,264	3,865
Cash and cash equivalents at beginning of period	30,915	62,944
Cash and cash equivalents at end of period	$159,179	$66,809
Supplemental disclosures of cash flow information:		
Cash paid for interest	$1,334	$823
Supplemental disclosures of non-cash financing activities:		
Purchases of property and equipment in accounts payable and accrued expenses	$14	$—

The accompanying notes are an integral part of these condensed consolidated financial statements.

Flexion Therapeutics, Inc.

Notes to Condensed Consolidated Financial Statements (Unaudited)

1. Overview and Nature of the Business

Flexion Therapeutics, Inc. ("Flexion" or the "Company") was incorporated under the laws of the state of Delaware on November 5, 2007. Flexion is a specialty pharmaceutical company focused on the development and commercialization of novel, local therapies for the treatment of patients with musculoskeletal conditions, beginning with osteoarthritis ("OA"), a type of degenerative arthritis. On October 6, 2017, the U.S. Food and Drug Administration, or FDA, approved Zilretta™, as the first and only extended-release, intra-articular, or IA (meaning in the joint), injection indicated for the management of OA related knee pain. Zilretta is a non-opioid therapy that employs Flexion's proprietary microsphere technology to provide pain relief for over 12 weeks. Zilretta is not intended for repeat administration, as the efficacy and safety of repeat administration of Zilretta have not been evaluated.

The Company is subject to risks and uncertainties common to companies in the biopharmaceutical industry, including, but not limited to, new technological innovations, dependence on key personnel, protection of proprietary technology, compliance with government regulations, and the ability to secure additional capital to fund operations. Successfully commercializing Zilretta will require significant sales and marketing efforts and the Company's pipeline programs may require significant additional research and development efforts, including extensive preclinical and clinical testing. These activities will in turn require significant amounts of capital, adequate personnel infrastructure and extensive compliance reporting capabilities. There can be no assurance when, if ever, the Company will realize significant revenue from the sales of Zilretta or if the development efforts supporting the Company's pipeline, including future clinical trials, will be successful.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying condensed consolidated financial statements as of September 30, 2017, and for the three and nine months ended September 30, 2017 and 2016, have been prepared in accordance with the rules and regulations of the Securities and Exchange Commission (the "SEC") and Generally Accepted Accounting Principles ("GAAP") for consolidated financial information including the accounts of the Company and its wholly-owned subsidiary after elimination of all significant intercompany accounts and transactions. Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statements. In the opinion of management, these condensed consolidated financial statements reflect all adjustments which are necessary for a fair statement of the Company's financial position and results of its operations, as of and for the periods presented. These condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and notes thereto contained in the Company's Annual Report on Form 10-K filed with the SEC on March 10, 2017.

The information presented in the condensed consolidated financial statements and related notes as of September 30, 2017, and for the three and nine months ended September 30, 2017 and 2016, is unaudited. The December 31, 2016 consolidated balance sheet included herein was derived from the audited financial statements as of that date, but does not include all disclosures, including notes, required by GAAP for complete financial statements.

Interim results for the three and nine months ended September 30, 2017 are not necessarily indicative of the results that may be expected for the fiscal year ending December 31, 2017, or any future period.

The accompanying condensed consolidated financial statements have been prepared on a basis which assumes that the Company will continue as a going concern and which contemplates the realization of assets and satisfaction of liabilities and commitments in the normal course of business. The Company has incurred recurring losses and negative cash flows from operations. As of September 30, 2017, the Company had cash, cash equivalents, marketable securities, and long-term investments of approximately $335,100,000. Management believes that current cash, cash equivalents and marketable securities on hand at September 30, 2017, together with the net proceeds of its October 2017 common stock offering of approximately $132,400,000 described in note 12, should be sufficient to fund operations for at least the next twelve months from the issuance date of these financial statements. The future viability of the Company is dependent on sales revenue from Zilretta and its ability to raise additional capital to finance its operations, to fund increased research and development costs in order to seek approval for commercialization of its product candidates, and to successfully commercialize Zilretta. The Company's failure to raise capital as and when needed would have a negative impact on its financial condition and its ability to pursue its business strategies as this capital is necessary for the Company to perform the research and development activities required to develop and seek approval for commercialization of the Company's product candidates, to establish a commercial infrastructure in order to generate future revenue streams, and to successfully commercialize Zilretta.

In May 2014, the FASB issued guidance which supersedes all existing revenue recognition requirements, including most industry-specific guidance. The new standard requires a company to recognize revenue when it transfers goods or services to customers in an amount that reflects the consideration that the company expects to receive for those goods or services. In August 2015, the FASB issued Accounting Standards Update 2015-14, Revenue from Contracts with Customers: Deferral of the Effective

Date. This latest standard defers the effective date of revenue standard ASU 2014-09 by one year and permits early adoption on a limited basis. Since the Company has not generated revenue as of September 30, 2017, this guidance will only impact future periods, if any, when revenue is earned. This update will replace existing revenue recognition guidance under GAAP when it becomes effective for the Company beginning January 1, 2018, with early adoption permitted in the first quarter of 2017. The updated standard will permit the use of either the retrospective or cumulative effect transition method. The Company adopted this guidance as of January 1, 2017 and will apply this guidance to any future revenue arrangements.

In November 2015, the FASB issued ASU 2015-17, Income Taxes (Topic 740), to simplify the presentation of deferred income taxes. Under the new standard, both deferred tax liabilities and assets are required to be classified as noncurrent in a classified balance sheet. ASU 2015-17 became effective for the Company's 2017 fiscal year. Given the Company has a full valuation against its deferred tax assets and liabilities, the impact of adopting this guidance was not material to the Company's financial statements.

In February 2016, the FASB issued ASU 2016-02, Leases ("ASU 2016-02"), to increase transparency and comparability among organizations by recognizing lease assets and liabilities, including for operating leases, on the balance sheet and disclosing key information about leasing arrangements. ASU 2016-02 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. The Company is currently evaluating the impact that the adoption of this guidance may have on the Company's financial statements.

In March 2016, the FASB released ASU 2016-09, which amends ASC Topic 718, Compensation-Stock Compensation, to require changes to several areas of employee share-based payment accounting in an effort to simplify share-based reporting. The update revises requirements in the following areas: minimum statutory withholding, accounting for income taxes, forfeitures, and intrinsic value accounting for private entities. For public companies, the new rules became effective for annual reporting periods beginning after December 15, 2016, and interim reporting periods within such annual period. The Company adopted this guidance beginning on January 1, 2017 and no longer records stock compensation expense net of forfeitures. The Company adopted this guidance using a modified retrospective approach to reflect forfeitures as they occurred in the total stock based compensation expense recorded in the Company's financial statements. The impact of this adoption was not material to the Company's financial statements.

In August 2016, the FASB issued ASU 2016-15, Statement of cash flows (Topic 230), to increase the consistency of presentation in how certain cash receipts and cash payments are presented and classified in the statement of cash flows. ASU 2016-15 will become effective for fiscal years, and the interim periods within those years, beginning after December 15, 2017. The Company is currently evaluating the potential impact that the adoption of this guidance may have on the Company's financial statements.

In November, 2016, the FASB issued ASU 2016-18, Statement of cash flows (Topic 230): Restricted Cash, to provide specific guidance on the cash flow classification and presentation of changes in restricted cash and restricted cash equivalents. The amendments in ASU 2016-18 require that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. ASU 2016-18 will become effective for fiscal years, and the interim periods within those years, beginning after December 15, 2017. Early adoption is permitted, including adoption in an interim period. The Company is currently evaluating the impact of this accounting standard on its condensed consolidated financial statements.

Consolidation

The accompanying condensed consolidated financial statements include the Company and its wholly-owned subsidiary, Flexion Securities Corporation, Inc. The Company has eliminated all intercompany transactions for the three and nine months ended September 30, 2017 and the year ended December 31, 2016.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and judgments that may affect the reported amounts of assets and liabilities, expenses and related disclosures. The Company bases estimates and judgments on historical experience and on various other factors that it believes to be reasonable under the circumstances. The most significant estimates in these condensed consolidated financial statements include useful lives with respect to long-lived assets, such as property and equipment and leasehold improvements, accounting for stock-based compensation, and accrued expenses, including clinical research costs. The Company’s actual results may differ from these estimates under different assumptions or conditions. The Company evaluates its estimates on an ongoing basis. Changes in estimates are reflected in reported results in the period in which they become known by the Company’s management.

Property and Equipment

Property and equipment are stated at cost less accumulated depreciation. Depreciation and amortization expense is recognized using the straight-line method over the following estimated useful lives:

	Estimated Useful Life (Years)
Computers, office equipment, and minor computer software	3
Computer software	7
Manufacturing equipment	7-10
Furniture and fixtures	5

Leasehold improvements are amortized over the shorter of the lease term or the estimated useful life of the related asset. Costs of major additions and improvements are capitalized and depreciated on a straight-line basis over their useful lives. Repairs and maintenance costs are expensed as incurred. Upon retirement or sale, the cost of assets disposed of and the related accumulated depreciation are removed from the accounts and any resulting gain or loss is credited or charged to income. Property and equipment includes construction-in-progress that is not yet in service.

Foreign Currencies

The Company maintains a bank account denominated in British Pounds. All foreign currency payables and cash balances are measured at the applicable exchange rate at the end of the reporting period. All associated gains and losses from foreign currency transactions are reflected in the consolidated statements of operations.

3. Fair Value of Financial Assets and Liabilities

The following tables present information about the Company's assets that are measured at fair value on a recurring basis as of September 30, 2017 and December 31, 2016 and indicate the level of the fair value hierarchy utilized to determine such fair value:

	Fair Value Measurements as of September 30, 2017 Using:			
(In thousands)	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents	$—	$146,175	$ —	$146,175
Marketable securities	—	175,921	—	175,921

	$—	$322,096	$ — $322,096

	Fair Value Measurements as of December 31, 2016 Using:		
(In thousands)	Level 1	Level 2	Level 3 Total
Assets:			
Cash equivalents	$—	$9,830	$ — $9,830
Marketable securities	—	179,414	— 179,414
	$—	$189,244	$ — $189,244

As of September 30, 2017 and December 31, 2016 the Company's cash equivalents that are invested in money market funds and overnight repurchase contracts are valued using Level 2 inputs and primarily rely on quoted prices in active markets for similar securities. The Company measures the fair value of marketable securities, which consist of U.S. government obligations, commercial paper, and corporate bonds, using Level 2 inputs and primarily relies on quoted prices in active markets for similar marketable securities. During the nine months ended September 30, 2017 and year ended December 31, 2016, there were no transfers between Level 1, Level 2, and Level 3.

The carrying values of accounts receivable, prepaid expenses, other current assets, accounts payable and accrued expenses approximate their fair value due to the short-term nature of these balances.

The Company has a term loan outstanding under its 2015 credit facility with MidCap Financial Funding XIII Trust and Silicon Valley Bank (the "2015 term loan"). The amount outstanding on its 2015 term loan is reported at its carrying value in the accompanying balance sheet. The Company determined the fair value of the 2015 term loan using an income approach that utilizes a

discounted cash flow analysis based on current market interest rates for debt issuances with similar remaining years to maturity, adjusted for credit risk. The 2015 term loan was valued using Level 2 inputs as of September 30, 2017 and December 31, 2016. The result of the calculation yielded a fair value that approximates its carrying value.

On May 2, 2017 the Company issued 3.375% convertible senior notes due 2024 (the "2024 Convertible Notes") with embedded conversion features. The Company estimated the fair value of the 2024 Convertible Notes using a discounted cash flow approach to derive the value of a debt instrument using the expected cash flows and the estimated yield related to the convertible notes. The significant assumptions used in estimating the expected cash flows were: the estimated market yield based on an implied yield and credit quality analysis of a term loan with similar attributes, and the average implied volatility of the Company's traded and quoted options available as of May 2, 2017. The Company recorded approximately $136.7 million as the fair value of the liability on May 2, 2017, with a corresponding amount recorded as a discount on the initial issuance of the 2024 Convertible Notes of approximately $64.5 million. The debt discount was recorded to equity and is being amortized to the debt liability over the life of the 2024 Convertible Notes using the effective interest method.

The fair value of the 2024 Convertible Notes, which differs from their carrying value, is influenced by interest rates, stock price and stock price volatility and is determined by prices for the 2024 Convertible Notes observed in market trading. The market for trading of the 2024 Convertible Notes is not considered to be an active market and therefore the estimate of fair value is based on Level 2 inputs. The estimated fair value of the 2024 Convertible Notes, face value of $201.3 million, was $225.4 million at September 30, 2017.

4. Marketable Securities

As of September 30, 2017 and December 31, 2016 the fair value of available-for-sale marketable securities by type of security was as follows:

	September 30, 2017			
(In thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. government obligations	$20,417	$ —	$ (3)	$20,414
Commercial paper	17,901	—	—	17,901
Corporate bonds	137,667	4	(65)	137,606
	$175,985	$ 4	$ (68)	$175,921

	December 31, 2016			
(In thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Commercial paper	$7,769	$ —	$ —	$7,769
U.S. government obligations	75,524	5	(12)	75,517
Corporate bonds	96,193	1	(66)	96,128

$179,486	$ 6	$ (78)	$ 179,414

As of September 30, 2017 and December 31, 2016, marketable securities consisted of approximately $175,921,000 and $174,688,000, respectively, of investments that mature within twelve months and as of December 31, 2016 approximately $4,725,000 of investments that mature within fifteen months. As of September 30, 2017 there were no marketable securities with maturities beyond twelve months.

5. Property and Equipment, Net

Property and equipment, net, as of September 30, 2017 and December 31, 2016 consisted of the following:

(In thousands)	September 30, 2017	December 31, 2016
Manufacturing equipment	$ 11,520	$ 10,099
Computer and office equipment	858	573
Software	434	434
Construction—in progress	586	1,254
Furniture and fixtures	454	402
Leasehold improvements	461	278
	14,313	13,040
Less: Accumulated depreciation	(2,832)	(1,376)
Total property and equipment, net	$ 11,481	$ 11,664

Depreciation expense for the nine months ended September 30, 2017 and 2016 was approximately $1,456,000 and $700,000, respectively. No property and equipment was disposed of during the nine months ended September 30, 2017. Approximately $2,265,000 in manufacturing equipment located at the Evonik facility was disposed of, resulting in a loss of $2,180,000 which was recorded in research and development expenses for the nine months ended September 30, 2016. Construction in progress primarily consists of amounts related to equipment purchased for the Company's portfolio expansion efforts.

6. Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets and other assets consisted of the following as of September 30, 2017 and December 31, 2016:

(In thousands)	September 30, 2017	December 31, 2016
Prepaid expenses	$ 2,907	$ 1,086
Deposits	61	2,099
Interest receivable on marketable securities	641	605
Total prepaid expenses and other current assets	$ 3,609	$ 3,790

On December 1, 2016, Flexion paid a refundable NDA fee in the amount of $2,038,100 to the FDA. The Company evaluated each of the published criteria to qualify for a waiver and concluded all criteria were met and thus, obtaining a refund of the fee was probable. As of December 31, 2016 the NDA fee was classified as a deposit in other current assets. On May 16, 2017, Flexion received the full refund of this NDA fee.

7. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consisted of the following:

(In thousands)	September 30, 2017	December 31, 2016
Research and development	$ 1,284	$ 1,606
Payroll and other employee-related expenses	4,946	3,393
Professional services fees	2,444	926
Other	646	159
Interest expense	2,956	161
Total accrued expenses and other current liabilities	$ 12,276	$ 6,245

8. Stock-Based Compensation

Stock Option Valuation

The fair value of each of the Company’s stock option grants is estimated on the date of grant using the Black-Scholes option-pricing model. The Company currently estimates its expected stock volatility based on the historical volatility of its publicly-traded peer companies and expects to continue to do so until such time as it has adequate historical data regarding the volatility of its own

publicly-traded stock price. The expected term of the Company's stock options has been determined utilizing the "simplified" method for awards that qualify as "plain vanilla" options. The expected term of stock options granted to non-employees is equal to the contractual term of the option award. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award. Expected dividend yield is based on the fact that the Company has never paid cash dividends and does not expect to pay any cash dividends in the foreseeable future. The relevant data used to determine the value of the stock option grants for the nine months ended September 30, 2017 and 2016 are as follows:

	Nine months ended September 30,	
	2017	2016
Risk-free interest rates	1.97-2.29%	1.05-1.90%
Expected dividend yield	0.00%	0.00%
Expected term (in years)	6.0	6.0
Expected volatility	69.9-72.8%	87.8-91.1%

The following table summarizes stock option activity for the nine months ended September 30, 2017:

(In thousands, except per share amounts)	Shares Issuable Under Options	Weighted Average Exercise Price
Outstanding as of December 31, 2016	3,268	$ 14.84
Granted	982	22.11
Exercised	(261)	11.47
Cancelled	(251)	18.48
Outstanding as of September 30, 2017	3,738	$ 17.63
Options vested and expected to vest at September 30, 2017	3,738	$ 17.63
Options exercisable at September 30, 2017	1,450	$ 14.34

Approximately 122,800 outstanding restricted stock units ("RSUs") are included in stock options outstanding at September 30, 2017. The RSUs are performance based awards which would begin vesting if and when the Company receives approval from the FDA of an NDA for Zilretta (the "Milestone"), which was achieved on October 6, 2017.

The aggregate intrinsic value of options is calculated as the difference between the exercise price of the options and the fair value of the Company's common stock for those options that had exercise prices lower than the fair value of the Company's common stock. A total of approximately 261,000 options, with an aggregate intrinsic value of approximately $2,511,800 were exercised during the nine months ended September 30, 2017.

At September 30, 2017 and 2016, there were options for the purchase of approximately 3,738,000 and 2,478,000 shares of the Company's common stock outstanding, respectively, with a weighted average remaining contractual term of 8.0 years and with a weighted average exercise price of $17.63 and $15.11 per share, respectively.

The weighted average grant date fair value of options granted during the nine months ended September 30, 2017 and 2016 was $14.19 and $11.90, respectively.

Stock-based Compensation

The Company recorded stock-based compensation expense related to stock options for the three and nine months ended September 30, 2017 and 2016 as follows:

	Three months ended		Nine months ended	
	September 30,		September 30,	
(In thousands)	2017	2016	2017	2016
Research and development	$1,057	$543	$2,859	$1,656
General and administrative	1,772	1,160	4,711	3,307
	$2,829	$1,703	$7,570	$4,963

As of September 30, 2017, unrecognized stock-based compensation expense for stock options outstanding was approximately $26,223,061 which is expected to be recognized over a weighted average period of 2.9 years.

Restricted Stock Units

On January 4, 2016, the Company granted RSUs with performance and time-based vesting conditions to certain executives. These RSUs vest, and the underlying shares of common stock become deliverable, beginning when Milestone is achieved. As a result of the Milestone being achieved on October 6, 2017, the number of shares of the Company's common stock earned under these awards is 122,800 with an approximate value of $2,234,960 as of the grant date and will vest over a period of three years. Compensation costs will be recognized over the remaining requisite service period of these awards, beginning on the Milestone achievement date.

9. Net Loss per Share

Basic and diluted net loss per share was calculated as follows for the three and nine months ended September 30, 2017 and 2016:

	For the three months ended		For the nine months ended	
	September 30,		September 30,	
(In thousands)	2017	2016	2017	2016
Numerator:				
Net loss	$(34,188)	$(17,782)	$(86,953)	$(48,782)
Net loss:	$(34,188)	$(17,782)	$(86,953)	$(48,782)
Denominator:				
Weighted average common shares outstanding, basic and diluted	31,931	27,524	31,821	23,938
Net loss per share, basic and diluted	$(1.07)	$(0.65)	$(2.73)	$(2.04)

The following common stock equivalents were excluded from the calculation of diluted net loss per share for the periods indicated as including them would have an anti-dilutive effect:

	For the three months ended		For the nine months ended	
	September,		September,	
	2017	2016	2017	2016
Shares issuable upon conversion of the 2024 convertible notes	7,514,937	-	4,171,895	-
Stock Options	3,680,096	2,359,370	3,514,511	2,265,023
Restricted stock units	126,219	189,300	168,196	187,220
Total	11,321,252	2,548,670	7,854,602	2,452,243

10. Debt

Term Loan

On August 4, 2015, the Company entered into a credit and security agreement with MidCap Financial Trust, as agent, and MidCap Financial Funding XIII Trust and Silicon Valley Bank, as lenders, (the "Lenders"), to borrow up to $30,000,000 in term loans. The Company concurrently borrowed an initial term loan of $15,000,000 under the facility. The Company granted the Lenders a security interest in substantially all of its personal property, rights and assets, other than intellectual property, to secure the payment of all amounts owed under the credit facility. The Company agreed not to encumber any of its intellectual property without the Lenders' prior written consent. The Company also agreed to maintain a balance in cash or cash equivalents at Silicon Valley Bank equal to the principal balance of the loan plus 5% for so long as the Company maintains any cash or cash equivalents in non-secured bank accounts.

On July 22, 2016, the Company borrowed the remaining $15,000,000 under the credit and security agreement, in the form of a second term loan. The second term loan is subject to the same credit terms as the initial term loan under the facility.

The credit and security agreement also contains certain representations, warranties, and covenants of the Company as well as a material adverse event clause. As of September 30, 2017, the Company was compliant with all covenants.

Borrowings under the credit facility accrue interest monthly at a fixed interest rate of 6.25% per annum. Following an interest-only period of 19 months, principal will be due in 36 equal monthly installments commencing March 1, 2017 and ending February 1, 2020 (the "maturity date"). Upon the maturity date, the Company will be obligated to pay a final payment equal to 9% of the total principal amounts borrowed under the facility. The final payment amount is being accreted to the carrying value of the debt using the straight line method, which approximates the effective interest method. As of September 30, 2017, the carrying value of the term loan was approximately $25,227,000, of which $9,967,000 was due within 12 months and $15,260,000 was due in greater than 12 months.

In connection with the credit and security agreement, the Company incurred debt issuance costs totaling approximately $150,000. These costs are being amortized over the estimated term of the debt using the straight-line method which approximates the effective interest method. The Company deducted the debt issuance costs from the carrying amount of the debt as of September 30, 2017 and December 31, 2016.

As of September 30, 2017, annual principal and interest payments due under the 2015 term loan are as follows:

Year	Aggregate Minimum Payments (in thousands)
2017	$ 2,869
2018	11,082
2019	10,448
2020	4,383
Total	$ 28,782
Less interest	(855)
Less final payment	(2,700)
Total	$ 25,227

2024 Convertible Notes

On May 2, 2017 the Company issued an aggregate of $201.3 million principal amount of the 2024 Convertible Notes. The 2024 Convertible Notes have a maturity date of May 1, 2024 are unsecured and accrue interest at a rate of 3.375% per annum, payable semi-annually on May 1 and November 1 of each year, beginning November 1, 2017. The Company received $194.8 million for the sale of the 2024 Convertible Notes, after deducting fees and expenses of $6.5 million.

The 2024 Convertible Notes are senior unsecured obligations and bear interest at a rate of 3.375% per year, payable semi-annually in arrears on May and November 1st of each year. The 2024 Convertible Notes will mature on May 1, 2024, unless earlier repurchased or converted. Upon conversion of the 2024 Convertible Notes, at the election of each holder of a 2024 Convertible Note (the Holder), the note will be convertible into cash, shares of the Company's

common stock, or a combination thereof, at the Company's election (subject to certain limitations in the 2015 term loan), at a conversion rate of approximately 37.3413 shares of common stock per $1,000 principal amount of the 2024 Convertible Notes, which corresponds to an initial conversion price of approximately $26.78 per share of the Company's common stock.

The Conversion Rate is subject to adjustment from time to time upon the occurrence of certain events, including, but not limited to, fundamental change events and certain corporate events that occur prior to the maturity date of the notes. In addition, if the Company delivers a notice of redemption, the Company will increase, in certain circumstances, the conversion rate for a Holder who elects to convert its notes in connection with such a corporate event or notice of redemption, as the case may be. At any time prior to the close of business on the business day immediately preceding February 1, 2024, Holders may convert all, or any portion, of the 2024 Convertible Notes at their option only under the following circumstances:

(1) during any calendar quarter commencing after the calendar quarter ending on June 30, 2017 (and only during such calendar quarter), if the last reported sale price of the common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each applicable trading day;

(2) during the five business day period after any ten consecutive trading day period (the "measurement period") in which the trading price per $1,000 principal amount of notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of the Company's common stock and the conversion rate on each such trading day;

(3) if the Company calls any or all of the notes for redemption, at any time prior to the close of business on the business day immediately preceding the redemption date; and

(4) upon the occurrence of specified corporate events.

On or after February 1, 2024, until the close of business on the business day immediately preceding the maturity date, holders may convert their notes at any time, regardless of the foregoing circumstances. The Company may redeem, for cash, all or any portion of the 2024 Convertible Notes, at its option, on or after May 6, 2020 if the last reported sale price of the Company's common stock has been at least 130% of the conversion price for at least 20 trading days during any 30 consecutive day trading period, at a redemption price equal to 100% of the principal amount of the 2024 Convertible Notes to be redeemed, plus accrued and unpaid interest.

The 2024 Convertible Notes are considered convertible debt with a cash conversion feature. Per ASC 470-20, Debt with Conversion and Other Options, the Company has separated the convertible debt into liability and equity components based on the fair value of a similar debt instrument excluding the embedded conversion option. The carrying amount of the liability component was calculated by measuring the fair value of a similar liability that does not have an associated convertible feature. The allocation was performed in a manner that reflected our non-convertible debt borrowing rate for similar debt. The equity component of the 2024 Convertible Notes was recognized as a debt discount and represents the difference between the proceeds from the issuance of the 2024 Convertible Notes and the fair value of the liability of the 2024 Convertible Notes on their respective dates of issuance. The excess of the principal amount of the liability component over its carrying amount ("debt discount") is amortized to interest expense using the effective interest method over seven years. The equity component is not re-measured as long as it continues to meet the conditions for equity classification. The liability component of $136.7 million was recorded as long-term debt at May 2, 2017 with the remaining equity component of $64.5 million recorded as additional paid-in capital.

In connection with the issuance of the 2024 Convertible Notes, the Company incurred approximately $6.5 million of debt issuance costs, which primarily consisted of underwriting, legal and other professional fees, and allocated these costs to the liability and equity components based on the allocation of the proceeds. Of the total debt issuance costs, $4.4 million were allocated to the liability component and are recorded as a reduction of the 2024 Convertible Notes in our consolidated balance sheets. The remaining $2.1 million was allocated to the equity component and is recorded as a reduction to additional paid-in capital.

Debt discount and issuance costs of $68.9 million are being amortized to interest expense over the life of the 2024 Convertible Notes using the effective interest rate method. As of September 30, 2017, the stated interest rate was 3.375%, and the effective interest rate was 9.71%. Interest expense related to the 2024 Convertible Notes for the three months ended September 30, 2017 was $3,488,296, including $1,658,620 related to amortization of the debt discount.

The table below summarizes the carrying value of the 2024 Convertible Notes as of September 30, 2017:

	(in thousands)
Gross proceeds	$ 201,250
Portion allocated to equity (additional paid-in capital)	(64,541)
Debt issuance costs	(6,470)
Portion allocated to equity (additional paid-in capital)	2,075
Amortization of debt discount and debt issuance costs	2,961
Carrying value 2024 Convertible Notes	$ 135,275

11. Foreign Currency

The Company maintains a bank account denominated in British Pounds. All foreign currency payables and cash balances are measured at the applicable exchange rate at the end of the reporting period. All associated gains and losses from foreign currency transactions are reflected in the consolidated statements of operations. Foreign currency losses for the three and nine months ended September 30, 2017 were $0.1 million and $0.5 million, respectively, compared to $0.6 million for the three and nine months ended September 30, 2016.

12. Subsequent Event

Financing

On October 16, 2017, the Company completed a follow-on public offering of its common stock, which resulted in the sale of 5,520,000 shares of the Company's common stock at a price to the public of $25.50 per share including shares sold pursuant to the exercise in full of the underwriters' option to purchase 720,000 additional shares. The Company received net proceeds from the follow-on financing of $132.4 million after deducting underwriting discounts, commissions, and offering costs paid by the Company.

13. Commitments and Contingencies

Operating Leases

Burlington Lease

In May 2013, the Company entered into a lease for office space in Burlington, Massachusetts (the "Lease"). The term of the Lease was for 42 months with minimum monthly lease payments beginning at $17,588 per month and escalating over the term of the Lease. In July 2015, the Company amended the Lease to add approximately 4,700 square feet of additional office space, with the option to lease an additional 5,400 square feet in the same building in Burlington, Massachusetts (the "Amendment"). In addition, at the time, The Company leased approximately 6,700 square feet of temporary space for use prior to delivery of the additional space. The Amendment also extended the term of the Lease through October 31, 2019. In addition, at the same time, The Company leased approximately 6,700 square feet of temporary space for use prior to delivery of the additional space under the Amendment. On September 30, 2015, the Company exercised its option for the additional 5,400 square feet of office space under the Amendment. On September 21, 2016, the Company entered into another amendment to extend the Lease for the 6,700 square feet of temporary space until October 31, 2017.

On April 7, 2017, the Company further amended the Lease to extend the term to October 31, 2023 on the then-existing office space, including the temporary space, consisting of approximately 28,600 square feet of office space in Burlington, Massachusetts. From November 2016 through October 2017, the Company's lease payment for this space was approximately $80,000 per month. Also, as part of this amendment to the Lease, the Company leased an additional 1,471 square feet of office space beginning in 2018. The lease payment for the 1,471 square feet of office space is approximately $4,100 per month.

On October 6, 2017, the Company exercised its option for an additional 6,450 square feet of space, with the term expected to commence on or about April 1, 2018. After April 2018, the Company will have approximately 36,500 square feet of office space in Burlington, Massachusetts under a lease term expiring on October 31, 2023. In addition to the base rent for the office space, which increases over the term of the amended Lease, the Company is responsible for its share of operating expenses and real estate taxes.

Woburn Lease

In February 2017, the Company entered into a five-year lease for laboratory space located in Woburn, Massachusetts with a monthly lease payment of approximately $15,000, which increases over the term of the lease, plus a share of operating expenses. The total cash obligations for the term of the lease are approximately $0.9 million.

Future minimum lease payments under the Company's lease obligations are as follows:

Year	Aggregate Minimum Payments
2017	$293,440
2018	1,341,672
2019	1,491,101
2020	1,533,276
2021	1,575,620
2022	1,446,770
2023	1,202,874
Total	$8,884,753

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ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis should be read in conjunction with our financial statements and accompanying notes included in this Quarterly Report on Form 10-Q and the financial statements and accompanying notes thereto for the fiscal year ended December 31, 2016 and the related Management's Discussion and Analysis of Financial Condition and Results of Operations, both of which are contained in our Annual Report on Form 10-K filed by us with the Securities and Exchange Commission, or SEC, on March 10, 2017.

Forward-Looking Statements

This discussion and analysis contains "forward-looking statements" that is statements related to future, not past, events – as defined in Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act that reflect our current expectations regarding future development activities, results of operations, financial condition, cash flows, performance and business prospects, and opportunities, as well as assumptions made by and information currently available to our management. Forward looking statements, include any statement that does not directly relate to a current historical fact. The Company has tried to identify forward-looking statements by using words such as "may," "will," "expect," "anticipate," "estimate," "intend," "plan," "predict," "potential," "believe," "should" and similar expressions. believe the expectations reflected in these forward-looking statements are reasonable, we cannot guarantee future results, events, levels of activity, performance or achievement. We undertake no obligation to update these forward-looking statements to reflect events or circumstances after the date of this report or to reflect actual outcomes.

Overview

We are a specialty pharmaceutical company focused on the development and commercialization of novel, local therapies for the treatment of patients with musculoskeletal conditions, beginning with osteoarthritis, a type of degenerative arthritis, referred to as OA.

On October 6, 2017, the U.S Food and Drug Administration, or FDA, approved Zilretta, as the first and only extended-release, intra-articular, or IA (meaning in the joint), injection indicated for the management of OA related knee pain. Zilretta is a non-opioid therapy that employs our proprietary microsphere technology to provide pain relief for over 12 weeks. Zilretta is not intended for repeat administration, as the efficacy and safety of repeat administration of Zilretta have not been evaluated.

We were incorporated in Delaware in November 2007, and to date we have devoted substantially all of our resources to developing our product candidates, including conducting clinical trials with our product candidates, preparing for the commercialization of Zilretta, providing general and administrative support for these operations and protecting our intellectual property. As of September 30, 2017 we have not yet generated any revenue from product sales. From our inception through September 30, 2017, we have funded our operations primarily through the sale of our common stock, convertible preferred stock, convertible debt, and debt financing. From our inception through September 30, 2017, we had raised approximately $624 million from such transactions, including from our initial and follow-on public offerings and the issuance of convertible notes. Until such time, if ever, as we can generate substantial product revenue, we expect to finance our cash needs through a combination of equity offerings, debt financings, government or third-party funding, and licensing or collaboration arrangements.

Zilretta™ (triamcinolone acetonide extended-release injectable suspension)

Zilretta combines a commonly administered steroid, triamcinolone acetonide, or TA, with poly lactic-co-glycolic acid, referred to as PLGA, with the goal of delivering a 32 mg dose to provide extended therapeutic concentrations in the

joint and persistent analgesic effect. Zilretta was designed to address the limitations of current IA therapies by providing extended, local analgesia. Both the magnitude and duration of pain relief provided by Zilretta in clinical trials have been shown to be clinically meaningful with the magnitude of pain relief amongst the largest seen to date in OA clinical trials.

The overall frequency of treatment-related adverse events in these trials was similar to those observed with placebo and no drug-related serious adverse events were reported. Based on the strength of our pivotal and other clinical trials, we believe that Zilretta has the potential to address a significant unmet medical need for OA pain management by providing safe, effective and extended pain relief. We believe Zilretta is uniquely distinguished by the following attributes:

- significant pain relief at week 12 versus placebo (p-value of <0.0001, 2 sided) as measured by the weekly mean of the Average Daily Pain, or ADP;
- durable and significant pain relief beginning at week 1 and continuing through week 12 with approximately 60% of patients reporting no pain or mild pain at week 12;
- numeric improvements in validated OA specific measures compared to placebo and immediate-release TA injection;
- an acceptable safety profile with side effect similar to placebo;

- statistically significant ($p<0.05$, 2-sided) reduction in the rise of blood glucose compared to that observed following immediate-release TA injection in Type 2 diabetic patients who also have knee OA;
- persistent concentrations of drug in the joint; and
- reduced rescue medicine consumption compared with placebo and immediate-release TA injection.

Additionally, we have fully enrolled more than 200 patients in an ongoing study to gather safety and exploratory efficacy data related to repeat administration. We expect full data to be available in the third quarter of 2018 to inform both clinical and regulatory perspectives, and these data will form the basis for an interaction with the FDA. Furthermore, we plan to initiate clinical trials of Zilretta in hip and shoulder OA and bilateral knee OA by the end of 2017.

Pipeline Program

FX101 – Intra-articular Therapy for the Treatment of OA Pain

FX101 (fluticasone extended-release) is a pre-clinical drug candidate that aims to provide extended pain relief for patients with OA. FX101 leverages our proprietary microsphere technology, and based on our pre-clinical, in vivo pharmacokinetic studies, we believe it has the potential to provide patients with pain relief for up to six months. We intend to conduct Good Laboratory Practice (GLP) toxicology studies, and pending successful results, we will file an Investigational New Drug to advance FX101 into clinical trials.

Financial Overview

Revenue

As of September 30, 2017 we have not generated any revenue since our inception. We expect to initiate a full commercial launch of Zilretta in late November 2017 and begin to generate initial revenue late in the fourth quarter of 2017. Additionally, we may generate revenue from licensing rights to our product or product candidates to third parties.

Operating Expenses

The majority of our operating expenses to date have been related to the development and commercial launch preparation activities of Zilretta.

Research and Development Expenses

Since our inception, we have focused our resources on our development activities, including: preclinical studies, clinical trials, and chemistry, manufacturing, and controls, or CMC. Our development expenses consist primarily of:

- expenses incurred under agreements with consultants, contract research organizations, or CROs, and investigative sites that conduct our preclinical studies and clinical trials;
- costs of acquiring, developing and manufacturing clinical trial materials;
- personnel costs, including salaries, benefits, stock-based compensation and travel expenses for employees engaged in scientific research and development functions;
- costs related to compliance with regulatory requirements;
- manufacturing costs in preparation for potential commercialization of Zilretta;
- expenses related to the in-license of certain technologies from pharmaceutical companies; and
- allocated expenses for rent and maintenance of facilities, insurance and other general overhead.

We expense research and development costs as incurred. Our direct research and development expenses consist primarily of external-based costs, such as fees paid to investigators, consultants, investigative sites, CROs and companies that manufacture our clinical trial materials and potential future commercial supplies, and are tracked on a program-by-program basis. We do not allocate personnel costs, facilities or other indirect expenses to specific research and development programs. These indirect expenses are included within the amounts designated as “Personnel and other costs” in the table below. Inventory acquired prior to receipt of the marketing approval of Zilretta was recorded as research and development expense as incurred. We will begin to capitalize the costs associated with the production of Zilretta as a result of the FDA approval on October 6, 2017.

The following table summarizes our research and development expenses for the periods presented:

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
(In thousands)	2017	2016	2017	2016
Direct research and development expenses by program:				
Zilretta	$ 5,479	$ 5,023	$ 14,951	$ 18,453
FX007	—	12	1	264
Portfolio expansion	1,115	52	2,088	222
Other	427	62	906	203
Total direct research and development expenses	7,021	5,149	17,946	19,142
Personnel and other costs	5,825	3,898	17,425	10,791
Total research and development expenses	$ 12,846	$ 9,047	$ 35,371	$ 29,933

We previously performed research and development for the U.S. Department of Defense under a cost reimbursable grant for a Phase 2 clinical trial investigating Zilretta in active military and medically retired veterans with post-traumatic knee OA Reimbursements were recorded as an offset to research and development expenses when invoices for allowable costs were prepared and submitted to the U.S. Department of Defense. Due to the challenges of enrolling military personnel with post-traumatic knee OA, we discontinued this Phase 2 trial and terminated the grant as of July 31, 2016. Payments under cost reimbursable grants with agencies of the U.S. government were provisional payments subject to adjustment upon audit by the U.S. government. We were reimbursed for approximately $757,000 under the grant.

Our research and development expenses are expected to increase in the foreseeable future. Specifically, our costs associated with Zilretta will increase as we conduct additional clinical trials and further the manufacturing process in support of commercialization. Evonik Corporation, or Evonik, our supplier of PLGA for Zilretta, had previously manufactured finished drug product for our Zilretta clinical trial materials; however, in early 2016 we decided to use Patheon UK Limited (part of Thermo Fisher Scientific), or Patheon, as our sole supplier of Zilretta finished drug product for clinical trials and commercial supply. We impaired approximately $2,265,000 in manufacturing equipment located at the Evonik facility, resulting in a loss of $2,180,000 which was recorded in research and development expenses for the nine months ended September 30, 2016.

We cannot determine with certainty the duration of and completion costs associated with ongoing and future clinical trials or the regulatory approval process associated with post-marketing development of Zilretta or development of any product candidates in our pipeline. The duration, costs and timing associated with the further development of Zilretta or the development of other product candidates will depend on a variety of factors, including uncertainties associated with the results of our clinical trials. As a result of these uncertainties, we are currently unable to estimate with any precision our future research and development expenses for expanded indications for Zilretta or any product candidates in our pipeline, or when we may generate sufficient revenue to achieve a positive cash flow position.

General and Administrative Expenses

General and administrative expenses consist primarily of personnel costs, including salaries, related benefits, travel expenses and stock-based compensation of our executive, finance, business development, commercial, information technology, legal and human resources functions. Other general and administrative expenses include an allocation of facility-related costs, patent filing expenses, and professional fees for legal, consulting, auditing and tax services.

We anticipate that our general and administrative expenses will increase in the future as we continue to build our corporate and commercial infrastructure to support the continued development and launch of Zilretta or any other product candidates. In particular, since Zilretta was approved by the FDA on October 6, 2017, we expect to incur material and ongoing increases in general and administrative expenses related to our hiring of a field sales force to market Zilretta in the United States. Additionally, we anticipate increased expenses related to the audit, legal and compliance, regulatory, investor relations and tax-related services associated with maintaining compliance with the Securities and Exchange Commission and Nasdaq requirements and healthcare laws and compliance requirements, director and officer insurance premiums and other costs associated with operating as a publicly-traded company.

Other Income (Expense)

Interest income. Interest income consists of interest earned on our cash and cash equivalents balances and our marketable securities. The primary objective of our investment policy is capital preservation.

Interest expense. We issued approximately $201.3 million in convertible notes, or the 2024 Convertible Notes, which pay semi-annual coupon payments at a rate of 3.375%. We expect to pay coupon payments through the maturity of the 2024 Convertible Notes on May 1, 2024. We have also borrowed $30.0 million under our 2015 term loan facility, and we incur interest related to this borrowing at a fixed rate of 6.25% per annum. We expect to incur future interest expense related to this borrowing until February 1, 2020.

Foreign currency gain (loss). We maintain a bank account denominated in British Pounds. All foreign currency payables and cash balances are measured at the applicable exchange rate at the end of the reporting period. All associated gains and losses from foreign currency transactions are reflected in the consolidated statements of operations, within other income and expense.

Other expense. Other expense consists of the net amortization of premiums and discounts related to our marketable securities, and our realized gains (losses) on redemptions of our marketable securities. We will continue to incur expenses related to net amortization of premiums on marketable securities for as long as we hold these investments.

Critical Accounting Policies and Significant Judgments and Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our financial statements, which we have prepared in accordance with generally accepted accounting principles in the United States, or GAAP. The preparation of our financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of our financial statements, and the reported revenue and expenses during the reported periods. We evaluate these estimates and judgments, including those described below, on an ongoing basis. We base our estimates on historical experience, known trends and events, contractual milestones and various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We believe that the estimates, assumptions and judgments involved in the accounting policies described in Management's Discussion and Analysis of Financial Condition and Results of Operations in Item 7 of our Annual Report on Form 10-K for the year ended December 31, 2016 have the greatest potential impact on our financial statements, so we consider them to be our critical accounting policies and estimates. There were no material changes to our critical accounting policies and estimates during the nine months ended September 30, 2017.

RESULTS OF OPERATIONS

Comparison of the three and nine months ended September 30, 2017 and 2016

The following tables summarize our results of operations for the three and nine months ended September 30, 2017:

	Three Months Ended September 30,			% Increase/
(In thousands)	2017	2016	Change	(Decrease)
Revenue	$—	$—	$—	—
Operating expenses:				
Research and development	12,846	9,047	3,799	42.0 %
General and administrative	18,375	8,388	9,987	119.1 %
Total operating expenses	31,221	17,435	13,786	79.1 %
Loss from operations	(31,221)	(17,435)	(13,786)	79.1 %
Other income (expense):				
Interest income	1,095	421	674	160.1 %
Interest expense	(3,843)	(561)	(3,282)	585.0 %
Other expense	(219)	(207)	(12)	5.8 %
Total other income (expense)	(2,967)	(347)	(2,620)	755.0 %
Net loss	$(34,188)	$(17,782)	$(16,406)	92.3 %

	Nine Months Ended September 30,			% Increase/
(In thousands)	2017	2016	Change	(Decrease)
Revenue	$—	$—	$—	—
Operating expenses:				
Research and development	35,371	29,933	5,438	18.2 %
General and administrative	46,533	18,295	28,238	154.3 %
Total operating expenses	81,904	48,228	33,676	69.8 %
Loss from operations	(81,904)	(48,228)	(33,676)	69.8 %
Other income (expense):				
Interest income	2,450	1,052	1,398	132.9 %
Interest expense	(7,363)	(1,039)	(6,324)	608.7 %
Other expense	(136)	(567)	431	(76.0)%
Total other income (expense)	(5,049)	(554)	(4,495)	811.4 %
Net loss	$(86,953)	$(48,782)	$(38,171)	78.2 %

Research and Development Expenses

	Three Months Ended September 30,			
(In thousands)	2017	2016	Change	% Increase/(Decrease)
Direct research and development expenses by program:				
Zilretta	$5,479	$5,023	$456	9.1 %
FX007	—	12	(12)	(100.0)%
Portfolio expansion	1,115	52	1,063	2044.2 %
Other	427	62	365	588.7 %
Total direct research and development expenses	7,021	5,149	1,872	36.4 %
Personnel and other costs	5,825	3,898	1,927	49.4 %
Total research and development expenses	$12,846	$9,047	$3,799	42.0 %

	Nine Months Ended September 30,			
(In thousands)	2017	2016	Change	% Increase/(Decrease)
Direct research and development expenses by program:				
Zilretta	$14,951	$18,453	$(3,502)	(19.0)%
FX007	1	264	(263)	(99.6)%
Portfolio expansion	2,088	222	1,866	840.5 %
Other	906	203	703	346.3 %
Total direct research and development expenses	17,946	19,142	(1,196)	(6.2)%
Personnel and other costs	17,425	10,791	6,634	61.5 %
Total research and development expenses	$35,371	$29,933	$5,438	18.2 %

Research and development expenses were $12.8 million and $9.0 million for the three months ended September 30, 2017 and 2016, respectively. The increase in research and development expenses of $3.8 million was primarily due to a $1.4 million increase in preclinical expenses related to our portfolio expansion and other program costs, a $0.5 million increase in development expenses for Zileretta, including CMC and clinical trial costs, and an increase of $1.9 million in personnel and other employee-related costs for additional headcount and stock compensation expense.

Research and development expenses were $35.3 million and $29.9 million for the nine months ended September 30, 2017 and 2016, respectively. The increase in research and development expenses of $5.4 million was primarily due to an increase of $2.6 million in preclinical expenses related to our portfolio expansion and other program costs, and a $6.6 million increase in personnel and other employee-related costs for additional headcount and stock compensation expense, partially offset by a decrease of $3.5 million in development expenses for Zilretta, including CMC and clinical trial costs.

General and Administrative Expenses

General and administrative expenses were $18.4 million and $8.4 million for the three months ended September 30, 2017 and 2016, respectively. The increase in general and administrative expenses of $10.0 million was primarily due to additional costs associated with building a commercial infrastructure to effectively support the commercialization of Zilretta, including increases in public relations and promotional expenses, market research expenses, and salary and related costs associated with additional headcount cost related to the creation of commercial marketing and sales capabilities, and stock compensation expense.

General and administrative expenses were $46.5 million and $18.3 million for the nine months ended September 30, 2017 and 2016, respectively. The increase in general and administrative expenses of $28.2 million was primarily due to additional costs associated with building a commercial infrastructure to effectively support the commercialization of Zilretta, including increases in public relations and promotional expenses, market research expenses, and salary and related costs associated with additional headcount cost related to the creation of commercial marketing and sales capabilities, and stock compensation expense.

Other Income (Expense)

Interest income was $1.1 million and $0.4 million for the three months ended September 30, 2017 and 2016, respectively. Interest income was $2.5 million and $1.1 million for the nine months ended September 30, 2017 and 2016, respectively. The increase in interest income was primarily due to an increase in average investment balance and yield during 2017.

Interest expense was $3.8 million and $0.6 million for the three months ended September 30, 2017 and 2016, and $7.4 million and $1.0 million for the nine months ended September 30, 2017 and 2016, respectively. The increase in interest expense for the three and nine months ended September 30, 2017 was primarily due to interest incurred on the 2024 Convertible Notes and the $30 million borrowed under our 2015 term loan.

Liquidity and Capital Resources

As of September 30, 2017, we had not generated any revenue and have incurred losses since our inception in 2007. As of September 30, 2017, we had an accumulated deficit of $298.6 million. We anticipate that we will continue to incur losses for the foreseeable future. We expect that our research and development and general and administrative expenses will continue to increase and, as a result, we will need additional capital to fund our operations, which we may seek to obtain through one or more equity offerings, debt and convertible debt financings, government or other third-party funding, and licensing or collaboration arrangements.

Since our inception through September 30, 2017, we have funded our operations primarily through the sale of our common stock and convertible preferred stock, convertible debt, and venture debt financing. From our inception through September 30, 2017, we had raised approximately $624 million from such transactions, including amounts from our initial and follow-on public offerings during 2014 and 2016 as well as our 2024 Convertible Notes issuance in 2017. As of September 30, 2017, we had cash and cash equivalents of $159.2 million and marketable securities of $175.9 million, which does not include the net proceeds of our October 2017 common stock offering of approximately $132.4 million. Based on our current operating plan we anticipate that our existing cash, cash equivalents and marketable securities will fund our operations for at least the next twelve months from the date of issuance of the financial statements included in this report. Cash in excess of immediate requirements is invested in accordance with our investment policy, primarily with a view to capital preservation.

The following table shows a summary of our cash flows for each of the nine months ended September 30, 2017 and 2016:

	Nine Months Ended September 30,	
(In thousands)	2017	2016
Cash flows used in operating activities	$ (65,938)	$ (41,485)
Cash flows provided by investing activities	1,820	(47,402)
Cash flows provided by financing activities	192,382	92,752
Net increase in cash and cash equivalents	$ 128,264	$ 3,865

Net Cash Used in Operating Activities

Operating activities used $65.9 million of cash in the nine months ended September 30, 2017. The cash flow used in operating activities resulted primarily from our net loss of $87.0 million for the period, partially offset by changes in our operating assets and liabilities of $9.3 million and non-cash charges of $11.7 million. Our non-cash charges consisted primarily of $7.6 million of stock-based compensation expense and $1.8 million of depreciation and amortization offset by $0.7 million of premium paid on marketable securities. Net cash provided by changes in our operating assets and liabilities consisted primarily of a $0.2 million decrease in our prepaid expenses and other current assets due primarily to the receipt of the refund of the NDA fee and an increase of $9.1 million in accounts payable and accrued expenses.

Operating activities used $41.5 million of cash in the nine months ended September 30, 2016. The cash flow used in operating activities resulted primarily from our net loss of $48.8 million for the period and cash used for changes in our operating assets and liabilities of $0.9 million, partially offset by non-cash charges of $8.2 million. Our non-cash charges consisted primarily of $5.0 million of stock-based compensation expense and $2.3 million of loss related to the disposal of our fixed assets, and $1.2 million of depreciation and amortization. Net cash used for changes in our operating assets and liabilities consisted primarily of a $0.7 million increase in prepaid expenses and other current assets due primarily to insurance costs and a decrease of $0.3 million in accounts payable and accrued expenses.

Net Cash Provided by Investing Activities

Net cash provided by investing activities was $1.8 million in the nine months ended September 30, 2017. Net cash provided by investing activities consisted primarily of cash received for the redemption and sale of marketable securities of $203.6 million, partially offset by cash used to purchase marketable securities of $199.8 million. In addition, $1.8 million of cash was used to purchase manufacturing equipment.

Net cash used in investing activities was $47.4 million in the nine months ended September 30, 2016. Net cash used in investing activities consisted primarily of cash used for the purchase of marketable securities of $80.2 million, partially offset by cash received for the redemption and sale of marketable securities of $40.9 million. In addition, $8.2 million of cash was used to purchase manufacturing equipment.

Net Cash Provided by Financing Activities

Net cash provided by financing activities was $192.4 million for the nine months ended September 30, 2017. Net cash provided by financing activities in the nine months ended September 30, 2017 consisted primarily of net cash received from the issuance of the 2024 Convertible Notes of $194.8 million and $3.5 million received from the exercise of stock options and employee stock purchases through our employee stock purchase plan. These cash inflows were partially offset by $5.8 million related to the payment of principal on our 2015 term loan.

Net cash provided by financing activities provided in the nine months ended September 30, 2016 was $92.8 million and consisted of $77.6 million in gross proceeds from a follow-on public offering, $15.0 million from borrowing the remaining amount under our credit facility with MidCap Financial Funding XIII Trust and Silicon Valley, and $0.4 million related to the exercises of stock options and employee stock purchases through our employee stock purchase plan.

Contractual Obligations

In February 2017, we entered into a five year lease for laboratory space located in Woburn, Massachusetts with a total cash obligation of approximately $0.9 million.

On April 7, 2017, we entered into an amendment to our existing lease for approximately 1,471 additional square feet of rented space located in Burlington, Massachusetts and an extension of our current lease term through October 2023. The amendment also gave us the option to lease approximately 6,450 of additional square feet beginning in 2018, which we exercised on October 6, 2017.

Off-Balance Sheet Arrangements

During the periods presented, we did not have, nor do we currently have, any off-balance sheet arrangements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our primary exposures to market risk are interest income sensitivity and equity price risk. Interest income is affected by changes in the general level of U.S. interest rates. Due to the short-term duration of a majority of our investment portfolio and the low risk profile of our investments, an immediate 10.0% change in interest rates would not have a material effect on the fair market value of our portfolio. Accordingly, we would not expect our operating results or cash flows to be affected to any significant degree by a sudden change in market interest rates on our investment portfolio.

Investments

We do not believe that our cash, cash equivalents and marketable securities have significant risk of default or illiquidity. While we believe our cash and cash equivalents and marketable securities are invested with the goal of capital preservation, we cannot provide absolute assurance that in the future our investments will not be subject to adverse changes in market value. In addition, we maintain significant amounts of cash and cash equivalents at one or more financial institutions that are in excess of federally insured limits.

Convertible Notes

On May 2, 2017, we issued $201.3 million aggregate principal amount of 2024 Convertible Notes. The 2024 Convertible Notes are senior unsecured obligations and bear interest at a rate of 3.375% per year, payable semi-annually in arrears on May and November 1st of each year. The 2024 Convertible Notes will mature on May 1, 2024, unless repurchased or converted earlier. The 2024 Convertible Notes will be convertible into cash, shares of our common stock, or a combination thereof, at our election (subject to certain limitations in the 2015 term loan), at a conversion rate of approximately 37.3413 shares of common stock per $1,000 principal amount of the 2024 Convertible Notes, which corresponds to a conversion price of approximately $26.78 per share of our common stock and represents a conversion premium of approximately 35% based on the last reported sale price of our common stock of $19.72 on May 2, 2017, the date the 2024 Convertible Notes offering was priced. As of May 2, 2017, the fair value of the 2024 Convertible Notes was $136.7 million. Our 2024 Convertible Notes include conversion and settlement provisions that are based on the price of our common stock at conversion or at maturity of the 2024 Convertible Notes. The amount of cash we may be required to pay is determined by the price of our common stock. The fair values of our 2024 Convertible Notes are dependent on the price and

volatility of our common stock and will generally increase or decrease as the market price of our common stock changes. As of September 30, 2017, the debt liability had a fair value that approximated fair value at issuance.

Foreign Currency Exchange

Most of our transactions are conducted in the U.S. dollar. We do have certain agreements with vendors located outside the United States, which have transactions conducted primarily in British Pounds and Euros. As of September 30, 2017 we had no payables to vendors denominated in currencies other than the U.S. dollar, therefore a hypothetical 10% change in foreign exchange rates would have no effect on the value of our liabilities. As of September 30, 2017, we had approximately $4.3 million in cash denominated in British Pounds. A hypothetical 10% change in foreign exchange rates would result in either a $0.3 million increase, in the event the U.S. dollar strengthens relative to the British Pound, or a $0.4 million decrease, in the event the U.S. dollar weakens relative to the British Pound, of cash denominated in British Pounds.

ITEM 4. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

We are responsible for maintaining disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act. Disclosure controls and procedures are controls and other procedures designed to ensure that the information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive and financial officer, as appropriate to allow timely decisions regarding required disclosure.

Based on our management’s evaluation (with the participation of our principal executive and financial officer) of our disclosure controls and procedures as required by Rule 13a-15 under the Exchange Act, our principal executive and financial officer has concluded that our disclosure controls and procedures were effective to achieve their stated purpose as of September 30, 2017, the end of the period covered by this report.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting during the quarter ended September 30, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

We are not currently a party to any material legal proceedings.

ITEM 1A. RISK FACTORS

You should consider carefully the risks described below, together with the other information contained in this Quarterly Report and in our other public filings in evaluating our business. The risk factors set forth below with an asterisk (*) next to the title contain changes to the description of the risk factors associated with our business previously disclosed in Exhibit 99.1 to our Current Report on Form 8-K filed on October 10, 2017. Additional risks and uncertainties that we are unaware of may also become important factors that affect us. If any of the following risks actually occurs, our business, financial condition, results of operations and future growth prospects would likely be materially and adversely affected. In these circumstances, the market price of our common stock would likely decline.

Risks Related to Our Financial Condition and Need for Additional Capital

(*) We have incurred significant losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future.

We have a limited operating history. To date, we have focused primarily on developing our lead product, Zilretta. Any additional product candidates we develop will require substantial development time and resources before we would be able to apply for or receive regulatory approvals and begin generating revenue from product sales. We have incurred significant net losses in each year since our inception, including net losses of $71.9 million, $46.3 million, and $27.3 million for fiscal years 2016, 2015, and 2014, respectively, and $87.0 million for the nine months ended September 30, 2017. As of September 30, 2017, we had an accumulated deficit of $298.6 million. We expect to incur net losses over the next few years as we invest in the commercialization of Zilretta and advance our development programs.

We have devoted most of our financial resources to product development, including our non-clinical development activities and clinical trials. To date, we have financed our operations exclusively through the sale of equity securities and debt. The size of our future net losses will depend, in part, on the rate of future expenditures and our ability to generate revenue. Even though the U.S. Food and Drug Administration, or FDA, has granted marketing approval for Zilretta, as of September 30, 2017, we had not generated any revenues from sales of Zilretta and cannot guarantee that our commercialization efforts will ever result in substantial product revenues.

We also expect to continue to incur substantial and increased expenses as we invest in the commercial launch of Zilretta, scale up commercial manufacturing of Zilretta and continue our development activities with respect to Zilretta and FX101. We also expect a continued increase in our expenses associated with our operations as a publicly-traded company. As a result of the foregoing, we expect to continue to incur significant and increasing losses and negative cash flows for the foreseeable future.

(*) As of September 30, 2017, we had not generated any revenue and may never be profitable.

Our ability to generate revenue and achieve profitability depends primarily on our ability to successfully commercialize Zilretta, as well as our ability to obtain regulatory approval for and commercialize other product candidates. We may never succeed in these activities and may never generate revenues that are significant enough to

achieve profitability. Our ability to generate future revenue from product sales depends heavily on our success in launching and commercializing Zilretta and any other product candidates for which we receive regulatory approval.

Because of the numerous risks and uncertainties associated with new pharmaceutical product launches and development efforts, we are unable to predict the timing or amount of increased expenses, when, or if, we will begin to generate meaningful revenue from product sales, or when, or if, we will be able to achieve or maintain profitability. In addition, our expenses could increase beyond expectations if we determine that additional sales and marketing personnel or other resources are necessary to successfully commercialize Zilretta or if we face any product liability claims that may be brought against us following the commercial launch of Zilretta.

If we are unable to generate significant revenues from product sales, particularly from sales of Zilretta, or to maintain an acceptable cost structure related to our operations, we may not become profitable and may need to obtain additional funding to continue operations.

(*) If we fail to obtain additional financing, we may be forced to delay, reduce or eliminate our product development programs and/or commercialization activities.

Developing and commercializing pharmaceutical products, including conducting preclinical studies and clinical trials, and building and maintaining sales and marketing capabilities, is expensive. We expect our expenses to substantially increase in connection with our ongoing activities, particularly as we build our sales and marketing organization, commercialize Zilretta and advance our clinical programs.

As of September 30, 2017, we had cash, cash equivalents and marketable securities of $335.1 million and working capital of $312.5 million. Based upon our current operating plan, we believe that our existing cash, cash equivalents and marketable securities, together with the net proceeds of approximately $132.4 million from our October 2017 common stock offering, will enable us to fund our operating expenses and capital requirements for at least the next twelve months from the issuance date of these financial statements. Regardless of our expectations as to how long our cash, cash equivalents and marketable securities will fund our operations, changing circumstances beyond our control may cause us to consume capital more rapidly than we currently anticipate.

Attempting to secure additional financing may divert our management from our day-to-day activities, which may adversely affect our ability to develop and commercialize our product candidates. In addition, we cannot guarantee that future financing will be available in sufficient amounts or on terms acceptable to us, if at all. If we are unable to raise additional capital when required or on acceptable terms, we may be required to:

- significantly delay, scale back or discontinue commercialization of Zilretta or the further development of Zilretta or our product candidates;
- seek corporate partners for our product candidates at an earlier stage than otherwise would be desirable or on terms that are less favorable than might otherwise be available;
- seek corporate partners to assist in the commercialization of Zilretta on terms that are less favorable than might otherwise be available;
- relinquish or license on unfavorable terms, our rights to technologies or product candidates that we otherwise would seek to develop or commercialize ourselves; or
- significantly curtail, or cease, operations.

We may sell additional equity or debt securities to fund our operations, which may result in dilution to our stockholders and impose restrictions on our business.

In order to raise additional funds to support our operations, we may sell additional equity or debt securities, which could adversely impact our existing stockholders as well as our business. The sale of additional equity or convertible debt securities would result in the issuance of additional shares of our capital stock and dilution to all of our stockholders. The incurrence of indebtedness would result in increased fixed payment obligations and could also result in certain restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business.

Our existing indebtedness contains restrictions that limit our flexibility in operating our business. We may be required to make a prepayment or repay our outstanding indebtedness earlier than we expect, which could have a materially adverse effect on our business, or may otherwise be unable to repay our indebtedness as it becomes due.

On August 4, 2015, we entered into a credit and security agreement with MidCap Financial SBIC, LP, or MidCap, as administrative agent, MidCap Funding XIII Trust and Silicon Valley Bank, as agent lenders, to borrow up to $30.0 million and contemporaneously drew down $15.0 million under the credit facility. The credit agreement contains various covenants that limit our ability to engage in specified types of transactions. These covenants limit our ability to, among other things:

- incur or assume certain debt;
- merge or consolidate or acquire all or substantially all of the capital stock or property of another entity;
- enter into any transaction or series of related transactions that would be deemed to result in a change in control of us under the terms of the agreement;
- change the nature of our business;
- change our organizational structure or type;
- amend, modify or waive any of our organizational documents;

- license, transfer or dispose of certain assets;
- grant certain types of liens on our assets;
- make certain investments;

- pay cash dividends;
- enter into material transactions with affiliates; and
- amend or waive provisions of material agreements in certain manners.

The restrictive covenants of the credit agreement could cause us to be unable to pursue business opportunities that we or our stockholders may consider beneficial.

A breach of any of these covenants could result in an event of default under the credit agreement. An event of default will also occur if, among other things, a material adverse change in our business, operations or condition occurs, which could potentially include a material impairment of the prospect of our repayment of any portion of the amounts we owe under the credit agreement occurs. In the case of a continuing event of default under the credit agreement, the lenders could elect to declare all amounts outstanding to be immediately due and payable, proceed against the collateral in which we granted the lenders a security interest under the credit agreement, or otherwise exercise the rights of a secured creditor. Amounts outstanding under the credit agreement are secured by all of our existing and future assets, excluding intellectual property, which is subject to a negative pledge arrangement.

In April 2017, we also issued $201.3 million principal amount of our 3.375% Convertible Senior Notes due 2024, or the 2024 Convertible Notes. The 2024 Convertible Notes will mature on May 1, 2024, unless earlier redeemed, repurchased or converted in accordance with the terms of the indenture governing the notes. If specified bankruptcy, insolvency or reorganization-related events of default occur, or if certain other events of default occur and the trustee or certain holders of the 2024 Convertible Notes elect, the principal of, and accrued and unpaid interest on, all of the then-outstanding 2024 Convertible Notes will automatically become due and payable. In addition, if we undergo certain fundamental change transactions specified in the indenture governing the 2024 Convertible Notes, the holders of the notes may require us to repurchase their notes at a price equal to 100% of the principal amount of the notes, plus any accrued and unpaid interest.

We may not have enough available cash or be able to raise additional funds on satisfactory terms, if at all, through equity or debt financings to repay or refinance our indebtedness at the time any such repayment or repurchase is required. In such an event, we may be required to delay, limit, reduce or terminate our product development or commercialization efforts or grant to others rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves. Our business, financial condition and results of operations could be materially adversely affected as a result.

Risks Related to Commercialization Activities

(*) Our prospects are highly dependent on the successful commercialization of Zilretta, which received approval in October 2017 from the FDA as an injectable, extended-release, intra-articular, or IA, treatment for patients with osteoarthritis, or OA, of the knee. To the extent Zilretta is not commercially successful, our business, financial condition and results of operations may be materially adversely affected and the price of our common stock may decline.

Zilretta is our only drug that has been approved for sale and it has only been approved for the treatment of patients with OA of the knee in the United States. We are focusing a significant portion of our activities and resources on Zilretta, and we believe our prospects are highly dependent on, and a significant portion of the value of our company relates to, our ability to successfully commercialize Zilretta in the United States.

Successful commercialization of Zilretta is subject to many risks. We have never, as an organization, launched or commercialized a product, and there is no guarantee that we will be able to do so successfully with Zilretta for its approved indication. There are numerous examples of unsuccessful product launches and failures to meet high expectations of market potential, including by pharmaceutical companies with more experience and resources than us.

Market acceptance of Zilretta and any other product for which we receive approval, will depend on a number of factors, including:

- the efficacy and safety as demonstrated in clinical trials;
- the timing of market introduction of the product as well as competitive products;
- the clinical indications for which the product is approved;
- acceptance by physicians, the medical community and patients of the product as a safe and effective treatment;

- the ability to distinguish safety and efficacy from existing, less expensive generic alternative therapies;
- the convenience of prescribing, administrating and initiating patients on the product;
- the potential and perceived advantages of the product over alternative treatments;
- the potential and perceived value of the product over alternative treatments;
- the cost of treatment in relation to alternative treatments, including any similar generic treatments;
- the availability of coverage and adequate reimbursement and pricing by third-party payors and government authorities;
- the prevalence and severity of adverse side effects; and
- the effectiveness of sales and marketing efforts.

With respect to Zilretta, while we have established our commercial team and have hired our sales force, we will need to train and further develop the team in order to be prepared to successfully coordinate the launch and commercialization of Zilretta. Even if we are successful in building out our commercial team, there are many factors that could cause the launch and commercialization of Zilretta to be unsuccessful, including a number of factors that are outside our control. The commercial success of Zilretta depends on the extent to which patients and physicians accept and adopt Zilretta as a treatment for OA of the knee, and we do not know whether our or others' revenue estimates in this regard will be accurate. For example, if the patient population suffering from OA of the knee is smaller than we estimate or if physicians are unwilling to prescribe or patients are unwilling to use Zilretta, the commercial potential of Zilretta will be limited. In addition, if Zilretta is not convenient for physicians to use, then it may not achieve widespread adoption, regardless of its comparative efficacy and safety. For example, Zilretta must be administered only by a health care professional in an office, clinic or hospital setting. In addition, Zilretta requires a multi-step preparation process, which may discourage some physicians from using Zilretta. Moreover, Zilretta's label indicates that it is not intended for repeat administration; this may negatively impact our commercialization efforts. We also do not know how physicians, patients and payors will respond to the pricing of Zilretta. In particular, our insight into pricing sensitivity may be delayed because as part of our initial launch strategy we intend to provide some free product as samples during a trial period, and do not know whether physicians that initially use Zilretta will continue to do so after using the free product samples.

Physicians may not prescribe Zilretta and patients may be unwilling to use Zilretta if coverage is not provided or reimbursement is inadequate to cover a significant portion of the cost. Additionally, any negative development for Zilretta in clinical development in additional indications, may adversely impact the commercial results and potential of Zilretta. Thus, significant uncertainty remains regarding the commercial potential of Zilretta.

If the launch or commercialization of Zilretta is unsuccessful or perceived as disappointing, our stock price could decline significantly and the long-term success of the product and our company could be harmed.

If we are unable to differentiate Zilretta from existing generic therapies for the treatment of OA, or if the FDA or other applicable regulatory authorities approve generic products that compete with Zilretta, our ability to successfully commercialize Zilretta would be adversely affected.

Immediate-release TA and other injectable immediate-release steroids, which are the current IA standard of care for OA pain, are available in generic form and are therefore relatively inexpensive compared to the pricing for Zilretta. These generic steroids also have well-established market positions and familiarity with physicians, healthcare payors and patients. Although we believe Zilretta has shown clinically meaningful differentiation as compared to immediate-release TA in our clinical trials, it is possible that as we receive data from additional clinical trials or in a post-marketing setting from physician and patient experiences with the commercial product, the data or commercial experiences will not continue to support such differentiation. It is also possible that the FDA, physicians and healthcare payors will not agree with our interpretation of our existing and future clinical trial data for Zilretta. If we are unable to demonstrate significant differentiation for Zilretta from immediate-release TA and other injectable immediate-release steroids, our opportunity for Zilretta to achieve premium pricing and be commercialized successfully would be adversely affected. For example, although Zilretta, compared to immediate-release TA, achieved statistical significance through 12 weeks in validated, OA specific pain, stiffness, function and quality of life

secondary measures in our Phase 3 trial and showed numeric improvements at weeks 2 through 12 on the daily pain rating scale, it did not achieve statistical significance in the daily pain rating scale during the course of the trial. As a result, it is possible that healthcare payors will not agree with our assessment that Zilretta is sufficiently differentiated from immediate-release TA to support premium pricing. In addition, while Zilretta demonstrated numeric improvement over immediate-release TA in the Phase 3 trial in pre-specified OA measures of pain, stiffness, function and quality of life, as measured by the Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) and Knee injury and Osteoarthritis Outcome Score (KOOS), these OA specific data are not included in the Zilretta label, which may limit our ability to effectively promote Zilretta to physicians and healthcare payors as a superior alternative to immediate-release TA.

In addition to existing generic steroids, such as immediate-release TA, the FDA or other applicable regulatory authorities may approve generic products that could compete with our product candidates. Once an NDA, including a Section 505(b)(2) application, is approved, the product covered thereby becomes a "listed drug" which can, in turn, be cited by potential competitors in support of approval of an abbreviated new drug application, or ANDA. The FDCA, FDA regulations and other applicable regulations and policies provide incentives to manufacturers to create modified, non-infringing versions of a drug to facilitate the approval of an ANDA or other application for generic substitutes. These manufacturers might only be required to conduct a relatively inexpensive study to show that their product has the same active ingredient(s), dosage form, strength, route of administration, conditions of use, or labeling as our product candidate and that the generic product is bioequivalent to ours, meaning it is absorbed in the body at the same rate and to the same extent as Zilretta. These generic equivalents, which must meet the same quality standards as branded pharmaceuticals, would be significantly less costly than ours to bring to market and companies that produce generic equivalents are generally able to offer their products at lower prices. Thus, after the introduction of a generic competitor, a significant percentage of the sales of any branded product is typically lost to the generic product. Accordingly, competition from generic equivalents to our product candidates would materially adversely impact our ability to successfully commercialize our product candidates, including Zilretta.

We face significant competition from other biopharmaceutical companies, and our operating results will suffer if we fail to compete effectively.

The biopharmaceutical industries are intensely competitive and subject to rapid and significant technological change. In addition, the competition in the pain and OA market is intense. We have competitors both in the United States and internationally, including major multinational pharmaceutical and biotechnology companies. For example, the injectable OA treatment market today includes many injectable immediate-release steroids, including TA, the active ingredient in Zilretta, as well as hyaluronic acid, or HA, injections. In addition, we expect that injectable therapies such as Zilretta will continue to be used primarily after oral medications no longer provide adequate pain relief. To the extent that new or improved oral pain medications are introduced that demonstrate better long-term efficacy and safety, patients and physicians may further delay the introduction of injectable therapies such as Zilretta in the OA treatment continuum. Zilretta could also face competition from other formulations or devices that deliver pain medication on an extended basis, such as transdermal delivery systems or implantable devices.

Many of our competitors have substantially greater financial, technical and other resources, such as larger research and development staffs and experienced commercial and manufacturing organizations. Mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even more resources being concentrated in our competitors. As a result, these companies may obtain regulatory approval more rapidly than we are able and may be more effective in selling and marketing their products as well. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large, established companies. Competition may increase further as a result of advances in the commercial applicability of technologies and greater availability of capital for investment in these industries. Our competitors may succeed in developing, acquiring or licensing on an exclusive basis drug products or drug delivery technologies that are more effective or less costly than Zilretta or any other product candidate that we are currently developing or that we may develop.

We believe that our ability to successfully compete will depend on, among other things:

- the efficacy and safety of our product candidates, including as relative to marketed products and product candidates in development by third parties;
- the ability to distinguish safety and efficacy from existing, less expensive generic alternative therapies;
- the time it takes for our product candidates to complete clinical development and receive marketing approval;
    - the ability to maintain a good relationship with regulatory authorities;
- the ability to commercialize and market any of our product candidates that receive regulatory approval;
- the price of our products, including in comparison to branded or generic competitors;

- whether coverage and adequate levels of reimbursement are available under private and governmental health insurance plans, including Medicare;

- the ability to protect intellectual property rights related to our product candidates;
- the ability to manufacture on a cost-effective basis and sell commercial quantities of any of our product candidates that receive regulatory approval; and
- acceptance of any of our product candidates that receive regulatory approval by physicians and other healthcare providers.

If our competitors market products that are more effective, safer or less expensive than Zilretta or our other future products, if any, or that reach the market sooner than any future products, if any, we may not achieve commercial success. In addition, the

biopharmaceutical industry is characterized by rapid technological change. Because we have limited research and development capabilities, it may be difficult for us to stay abreast of the rapid changes in each technology. If we fail to stay at the forefront of technological change, we may be unable to compete effectively. Technological advances or products developed by our competitors may render our technologies or product candidates obsolete, less competitive or not economical.

(*) If we are unable to maintain sales and marketing capabilities or enter into agreements with third parties to market, distribute and sell our product candidates, we may be unable to generate any revenue.

Our strategy is to establish a targeted sales and marketing organization to successfully execute the commercial launch of Zilretta in the United States. While we have established our commercial team and have hired our sales force, we do not have any experience commercializing pharmaceutical products as an organization. In order to successfully market Zilretta, we must continue to build our sales, marketing, managerial, compliance and related capabilities or make arrangements with third parties to perform these services. These efforts will continue to be expensive and time-consuming, and we will be competing with other pharmaceutical and biotechnology companies to recruit, hire, train and retain marketing and sales personnel. If we are unable to establish adequate sales, marketing and distribution capabilities, whether independently or with third parties, we may not be able to appropriately commercialize Zilretta and may not become profitable.

Additionally, our strategy in the United States includes distributing Zilretta solely through a limited network of third-party specialty distributors and one specialty pharmacy. While we have entered into agreements with a specialty pharmacy and specialty distributors to distribute Zilretta in the United States, they may not perform as agreed or they may terminate their agreements with us. Also, we may need to enter into agreements with additional specialty distributors or specialty pharmacies, and there is no guarantee that we will be able to do so on commercially reasonable terms or at all. If we are unable to maintain and, if needed, expand, our network of specialty distributors and specialty pharmacies, we would be exposed to substantial distribution risk.

To date, we have not entered into any strategic partnerships for any of our product candidates. We face significant competition in seeking appropriate strategic partners, and these strategic partnerships can be intricate and time consuming to negotiate and finalize. We may not be able to negotiate strategic partnerships for territories outside of the United States on acceptable terms, or at all. We are unable to predict when, if ever, we will enter into any strategic partnerships outside of the United States because of the numerous risks and uncertainties associated with establishing strategic partnerships. To the extent that we enter into collaboration arrangements, our future collaboration partners may not dedicate sufficient resources to the commercialization of our product candidates or may otherwise fail in their commercialization due to factors beyond our control. If we are unable to establish effective collaborations to enable the sale of our product candidates in territories outside of the United States, or if our potential future collaboration partners do not successfully commercialize our product candidates in these territories, our ability to generate revenue from product sales will be adversely affected.

We and any collaboration partners that we may engage will be competing with many companies that currently have extensive and well-funded marketing and sales operations. If we, alone or with commercialization partners, are unable to compete successfully against these established companies, the commercial success of any approved products will be limited. In addition, if we are unable to effectively develop and maintain our commercial team, including our U.S. sales force, or maintain and, if needed, expand, our network of specialty distributors and specialty pharmacies, our ability to effectively commercialize Zilretta and generate product revenues would be limited.

We plan to rely on a single specialty pharmacy for distribution of Zilretta in the United States, and the loss of that specialty pharmacy or its failure to distribute Zilretta effectively would adversely affect sales of Zilretta.

We plan to rely on a single specialty pharmacy for distribution of Zilretta in the United States. A specialty pharmacy is a pharmacy that specializes in the dispensing of medications for complex or chronic conditions, which often require a high level of patient education and ongoing management. The use of specialty pharmacies involves certain risks, including, but not limited to, risks that these specialty pharmacies will:

- not provide us accurate or timely information regarding their inventories, the number of patients who are using our products or complaints about our products;
- reduce or discontinue their efforts to sell or support or otherwise not effectively sell or support our products;
- not devote the resources necessary to sell our products in the volumes and within the time frames that we expect;
- be unable to satisfy financial obligations to us or others; or
- cease operations.

In the event that our single specialty pharmacy does not fulfill its contractual obligations to us, or refuses or fails to adequately serve patients, or the agreement is terminated without adequate notice, shipments of Zilretta, and associated revenues, would be adversely affected. In addition, we expect that it would take a significant amount of time if we were required to change our specialty pharmacy.

If we are unable to effectively train and equip our sales force, our ability to successfully commercialize Zilretta will be harmed.

Zilretta will be a newly-marketed drug and, therefore, none of the members of our sales force will have ever promoted Zilretta prior to its launch. As a result, we will be required to expend significant time and resources to train our sales force to be credible, persuasive and compliant with applicable laws in marketing Zilretta for the treatment of patients with OA of the knee. In addition, we must train our sales force to ensure that an appropriate and compliant message about Zilretta is being delivered. If we are unable to effectively train our sales force and equip them with compliant and effective materials, including medical and sales literature to help them appropriately inform and educate regarding the potential benefits of Zilretta and its proper administration, our efforts to successfully commercialize Zilretta could be put in jeopardy, which would negatively impact our ability to generate product revenues.

(*) If we are unable to achieve and maintain adequate levels of third-party payor coverage and reimbursement for Zilretta, or, if approved, any other product candidates, on reasonable pricing terms, their commercial success may be severely hindered.

Successful sales of any approved product candidates depend on the availability of adequate coverage and reimbursement from third-party payors. Patients who are prescribed medicine for the treatment of their conditions generally rely on third-party payors to reimburse all or part of the costs associated with their prescription drugs. Adequate coverage and reimbursement from governmental healthcare programs, such as Medicare and Medicaid, and commercial payors is critical to new product acceptance. Coverage decisions may depend upon clinical and economic standards that disfavor new drug products when more established or lower cost therapeutic alternatives are already available or subsequently become available. The resulting reimbursement payment rates for Zilretta, and if approved, our other product candidates, might not be adequate or may require co-payments that patients find unacceptably high.

Payors may require documented proof that patients meet certain eligibility criteria in order to be reimbursed for Zilretta, for example requiring that a patient first try and fail treatment with an injection of generic corticosteroid. Payors may even require that pre-approval, or prior-authorization, be obtained from the payor for reimbursement of Zilretta. Patients are unlikely to use Zilretta, and if approved, any other products, unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of our products. For example, Zilretta will be sold to physicians on a “buy and bill” basis. Buy and bill products must be purchased by healthcare providers before they can be administered to patients. Healthcare providers subsequently must seek reimbursement for the product from the applicable third party payor, such as Medicare or a health insurance company. Healthcare providers may be reluctant to administer Zilretta because they would have to fund the purchase of the product and then seek reimbursement, which may be different from their purchase price, or because they do not want the additional administrative burden required to obtain reimbursement for the product.

Further, the status of a J-Code for Zilretta could also affect reimbursement. J-Codes are permanent reimbursement codes maintained by the Centers for Medicare and Medicaid Services, or CMS that are a component of the Healthcare Common Procedure Coding System and are typically used to report injectable drugs that ordinarily cannot be self-administered. We do not currently have a specific J-Code for Zilretta. Until we can obtain a specific J-Code for Zilretta, we will need to use a non-specific miscellaneous J-Code for Zilretta, which is a temporary code to facilitate reimbursement for physician-administered Zilretta. Since miscellaneous J-Codes may be used for a wide variety of products, health plans may have more difficulty determining the actual product used and billed for the patient. As a

result, these claims must often be submitted with additional information and manually processed, which can create delays in claims processing times as well as increasing the likelihood for claim errors.

In addition, the market for Zilretta and any of our other product candidates may depend significantly on access to third-party payors' medical policies, drug formularies, or lists of medications for which third-party payors provide coverage and reimbursement. The industry competition to be included in such formularies often leads to downward pricing pressures on pharmaceutical companies, and we will be required to offer discounted rates to certain government and other payors to ensure coverage of our drugs. Also, third-party payors may refuse to include a particular branded drug in their formularies or otherwise restrict patient access to a branded drug when a less costly generic equivalent or other alternative is available.

Third-party payors, whether foreign or domestic, or governmental or commercial, are developing increasingly sophisticated methods of controlling healthcare costs. The U.S. government, state legislatures and foreign governments have shown significant interest in implementing cost-containment programs, including price controls, restrictions on reimbursement and requirements for substitution of generic products. In addition, in the United States, no uniform policy of coverage and reimbursement for drug products exists among third-party payors. Therefore, coverage and reimbursement for drug products can differ significantly from payor to payor. As a result, the coverage determination process is often a time-consuming and costly process that will require us to provide scientific and

clinical support for the use of our products to each payor separately, with no assurance that coverage and adequate reimbursement will be obtained.

Further, we believe that future coverage and reimbursement will likely be subject to increased restrictions both in the United States and in international markets. Third party coverage and reimbursement for Zilretta or, if approved, any of our other product candidates, may not be available or adequate in either the United States or international markets, or may be more limited than the indications for which the drug is approved by the FDA or comparable foreign regulatory authorities. Moreover, eligibility for coverage and reimbursement does not imply that a drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. If coverage and reimbursement are not available or only available at limited levels, we may not be able to successfully commercialize any product candidate for which we obtain marketing approval, including Zilretta, which could have a material adverse effect on our business, results of operations, financial condition and prospects.

(*) Guidelines and recommendations published by various organizations can reduce the use of Zilretta and any other products we may commercialize.

Government agencies promulgate regulations and guidelines directly applicable to us and to our products and product candidates. In addition, professional societies, such as the American Academy of Orthopedic Surgeons, practice management groups, private health and science foundations and organizations involved in various diseases from time to time may also publish guidelines or recommendations to the healthcare and patient communities. Recommendations of government agencies or these other groups or organizations may relate to such matters as usage, dosage, route of administration and use of concomitant therapies. Recommendations or guidelines that do not recognize Zilretta or our other product candidates, suggest the reduced use of Zilretta or our other product candidates, or suggest the use of competitive or alternative products as the standard of care to be followed by patients and healthcare providers could result in decreased use of Zilretta or any future products.

(*) Following commercial launch, Zilretta will be available to a much larger number of patients and in broader populations, and we do not know whether the results of Zilretta’s use in such larger number of patients and broader populations will be consistent with the results from our clinical studies.

While the FDA granted approval of Zilretta based on the data included in the NDA, including data from our completed pivotal Phase 3 clinical trial, we do not know whether the results when a large number of patients and broader populations are exposed to Zilretta, including results related to safety and efficacy, will be consistent with the results from earlier clinical studies of Zilretta that served as the basis for the approval of Zilretta. New data relating to Zilretta, including from adverse event reports, our on-going repeat-dose safety study, or our planned clinical trials of Zilretta in hip and shoulder OA and bilateral knee OA, may result in changes to the product label and may adversely affect sales, or result in withdrawal of Zilretta from the market. The FDA and regulatory authorities in other jurisdictions may also consider any new data in connection with further marketing approval applications. If Zilretta or any additional approved products cause serious or unexpected side effects after receiving market approval, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw their approval of the product or impose restrictions on its distribution in the form of a modified Risk Evaluation and Mitigation Strategy;
- regulatory authorities may require the addition of labeling statements, such as warnings or contraindications;
- we may be required to change the way the product is promoted or administered or conduct additional clinical studies;
- we could be sued and held liable for harm caused to patients; or
- our reputation may suffer.

Any of these events could prevent us from maintaining market acceptance of the affected product and could substantially increase the costs of commercializing Zilretta or any additional products.

Recently enacted and future legislation, including health care reform measures, may increase the difficulty and cost for us to commercialize Zilretta and any future products and may affect the prices we may obtain.

The United States and some foreign jurisdictions are considering, or have enacted, a number of legislative and regulatory proposals to change the healthcare system in ways that could affect our ability to sell Zilretta, and if approved for sale, our other potential products, profitably. Among policy makers and third-party payors in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been, and may continue to be, significantly affected by major legislative, congressional and enforcement initiatives. Moreover, in some foreign jurisdictions, pricing of prescription pharmaceuticals is already subject to government control.

In March 2010, PPACA was enacted, which was intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add transparency requirements for the healthcare and health insurance industries, impose taxes and fees on the health industry and impose additional health policy reforms. Among the PPACA provisions of importance to the pharmaceutical industry are the following:

- an annual, non-deductible fee on any entity that manufactures or imports certain branded prescription drugs and biologic agents, apportioned among these entities according to their market share in certain government healthcare programs;
- an increase in the rebates a manufacturer must pay under the Medicaid Drug Rebate Program to 23.1% and 13% of the average manufacturer price for branded and generic drugs, respectively;
- a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected;
- a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts to negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D;
- extension of manufacturers' Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations;
- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to additional individuals and by adding new mandatory eligibility categories for certain individuals with income at or below 133% of the Federal Poverty Level, thereby potentially increasing manufacturers' Medicaid rebate liability;
- expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program;
- new requirements under the federal Open Payments program, created under Section 6002 of PPACA, and its implementing regulations that manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) report annually to CMS information related to "payments or other transfers of value" made or distributed to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, and that applicable manufacturers and applicable group purchasing organizations report annually to CMS ownership and investment interests held by physicians (as defined above) and their immediate family members, with data collection and reporting to CMS currently required by March 31st, of each calendar year;
- a requirement to annually report drug samples that manufacturers and distributors provide to physicians;
- expansion of healthcare fraud and abuse laws, including the False Claims Act and the Anti-Kickback Statute, new government investigative powers, and enhanced penalties for non-compliance;
- an FDA-approval framework for follow-on biologic products;
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research;
- creation of the Independent Payment Advisory Board, which, which, if impaneled, would have authority to recommend certain changes to the Medicare program that do not affect coverage or quality, which, among other things, could result in reduced payments for prescription drugs and those recommendations could have the effect of law even if Congress does not act on the recommendations; and
- establishment of a Center for Medicare & Medicaid Innovation at CMS to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending.

Since its enactment, there have been judicial and Congressional challenges to certain aspects of PPACA. In January 2017, Congress voted to adopt a budget resolution for fiscal year 2017, or the Budget Resolution, that authorizes the implementation of legislation that would repeal portions of PPACA. The Budget Resolution is not a law; however, it is widely viewed as the first step toward the passage of legislation that would repeal certain aspects of PPACA. Further, on January 20, 2017, President Trump signed an Executive Order directing federal agencies with authorities and responsibilities under PPACA to waive, defer, grant exemptions from, or delay the implementation of any provision of PPACA that would impose a fiscal or regulatory burden on states, individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices. Congress also could consider subsequent legislation to replace elements of PPACA that are repealed.

We expect that PPACA, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and lower reimbursement, as well as additional downward pressure on the price that we receive for any approved product, including Zilretta. There has been increasing legislative and enforcement interest in the United States with respect to specialty drug pricing practices, including several recent U.S. Congressional inquiries and proposed bills designed to, among other things,

increase drug pricing transparency, reduce the cost of drugs under Medicare, review relationships between pricing and manufacturer patient assistance programs, and reform government program drug reimbursement methodologies. Any reduction in reimbursement from Medicare, Medicaid or other government-funded programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability or commercialize Zilretta and any future products for which we receive regulatory approval. Additionally, we are currently unable to predict what additional legislation or regulation, if any, relating to the healthcare industry may be enacted in the future or what effect recently enacted federal legislation or any such additional legislation or regulation would have on our business.

Risks Related to Product Development and Regulatory Compliance

We may never obtain regulatory approval of Zilretta for additional indications or any approval of our other product candidates in the United States, or we may never obtain approval for or commercialize Zilretta or our other product candidates outside of the United States, which would limit our ability to realize their full market potential.

While Zilretta has been approved by the FDA for the treatment of patients with OA of the knee, it has not been approved by the FDA for any other indications, and it has not been approved in any other jurisdiction for this indication or for any other indication. In order to market Zilretta for other indications or in other jurisdictions, or in order to market any of our other product candidates, we must obtain regulatory approval for each indication and in each applicable jurisdiction, and we may never be able to get such approval for Zilretta or our other product candidates.

Clinical trials conducted in one country may not be accepted by regulatory authorities in other countries, and regulatory approval in one country does not mean that regulatory approval will be obtained in any other country. Approval processes vary among countries and can involve additional product testing and validation and additional administrative review periods. Seeking foreign regulatory approval could result in difficulties and costs for us and require additional non-clinical studies or clinical trials, which could be costly and time consuming. Regulatory requirements can vary widely from country to country and could delay or prevent the introduction of our potential future products in those countries. Other than Zilretta in the United States, we do not have any products approved for sale in any jurisdiction, and we do not have experience in obtaining regulatory approval in international markets. If we do not receive marketing approval for Zilretta for any other indication or from any regulatory agency other than the FDA, we will never be able to commercialize Zilretta for any other indication in the United States or for any indication in any other jurisdiction. If we fail to comply with regulatory requirements in international markets or to obtain and maintain required approvals for our other product candidates, or if regulatory approval in international markets is delayed, our potential market will be reduced and our ability to realize the full market potential of Zilretta or our other product candidates will be harmed. Even if we do receive additional regulatory approvals, we may not be successful in commercializing those opportunities.

Clinical development is a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results. Clinical failure can occur at any stage of clinical development.

Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. The results of preclinical studies and early clinical trials of our product candidates may not be predictive of the results of subsequent clinical trials. In particular, the results generated in our completed Zilretta pivotal Phase 3 clinical trial do not ensure that any ongoing or future Zilretta clinical trial, including our ongoing repeat dose safety clinical trial or our planned clinical trials of Zilretta in hip and shoulder OA and bilateral knee OA, will be successful or consistent with the results generated in the Phase 3 trial.

We have conducted preclinical toxicology studies in healthy dogs with single and repeat doses of Zilretta, blank microspheres and immediate-release TA. The immediate-release TA and Zilretta groups produced similar findings in these studies. In the single-dose study, local cartilage findings of reduced extracellular matrix were completely reversed by the end of the nine-month recovery period in both the Zilretta and immediate-release TA study arms. With repeat administrations of Zilretta and immediate-release TA, a larger reduction in extracellular matrix in cartilage partially recovered by six months following the last dose; however, structural changes in cartilage were observed with repeat administrations of both Zilretta and immediate-release TA. Repeat administration of immediate-release TA has a long history of safe clinical use in patients with OA, and in a randomized, double-blind clinical trial conducted in 2003 by Raynauld et al, administration of immediate-release TA or saline every three months for up to two years in 68 OA patients was well-tolerated and demonstrated no deleterious effects in the knee joint when assessed by clinical exam and X-ray evaluation. Using a more sensitive MRI imaging technology in 2015, Driban et al again demonstrated that cartilage structure changes between OA patients treated with immediate-release TA and saline in patients were similar. In 2017, the same authors reporting on the same data set concluded that there was a relative loss of cartilage in the immediate-release TA group. We are studying Zilretta in a repeat dose safety clinical trial and if the data from the repeat dose trial are supportive, we intend to seek inclusion of these data in a supplemental NDA and expansion of the label for Zilretta to include repeat dosing. It is possible that we could observe detrimental effects on joint structure with repeated doses of Zilretta, similar to those outcomes observed in our preclinical studies and third party trials, which

would limit Zilretta's commercial potential and could harm our ability to maintain regulatory approval or obtain approval to market Zilretta in additional indications or additional jurisdictions.

Product candidates in later stage clinical trials may fail to show the desired safety and efficacy traits despite having progressed through preclinical studies and initial clinical trials. In addition to the safety and efficacy trials of any product candidate, clinical trial failures may result from a multitude of factors including flaws in trial design, dose selection, placebo effect and patient enrollment criteria. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier trials. Based upon negative or inconclusive results, we or our collaborators may decide, or regulators may require us, to conduct additional clinical trials or preclinical studies. In addition, data obtained from trials and studies are susceptible to varying interpretations, and regulators may not interpret our data as favorably as we do, which may delay, limit or prevent regulatory approval. In any event, our future clinical trials may not be successful.

If Zilretta or any other product candidate is found to be unsafe or lack efficacy in particular indications, we will not be able to obtain regulatory approval for the indication and our business could be materially harmed.

Delays in clinical trials are common and have many causes, and any delay could result in increased costs to us and jeopardize or delay our ability to obtain regulatory approval and commence product sales.

We may experience delays in clinical trials of our products and product candidates. Our clinical trials may not begin on time, have an effective design, enroll a sufficient number of patients, or be completed on schedule, if at all. Our clinical trials can be delayed for a variety of reasons, including:

- inability to raise funding necessary to initiate or continue a trial;
- delays in obtaining regulatory approval to commence a trial;
- delays in reaching agreement with the FDA on final trial design;
- imposition of a clinical hold for safety reasons or following an inspection of our clinical trial operations or trial sites by the FDA or other regulatory authorities;
- delays in reaching agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical trial sites;
- delays in obtaining required institutional review board approval at each site;
- delays in recruiting suitable patients to participate in a trial;
- delays in having patients complete participation in a trial or return for post-treatment follow-up;
- clinical sites dropping out of a trial to the detriment of enrollment;
- time required to add new clinical sites; or
- delays by our contract manufacturers to produce and deliver sufficient supply of clinical trial materials.

For example, our previously completed Phase 2b dose-ranging clinical trial for Zilretta was initially subject to a clinical hold imposed by the FDA due to the observation of effects of PLGA microspheres on synovial tissue from Zilretta injections. While we were able to begin enrollment initially at non-U.S. sites and later at U.S. sites after the clinical hold was lifted without restriction by the FDA, the hold delayed our completion of the trial and resulted in additional expense. Also in September 16, 2014, the FDA notified us that it had placed a clinical hold on the Zilretta IND due to a single occurrence of what was then reported to be septic arthritis, an infection of the injected knee joint, of a patient in the clinical trial. While the clinical hold was lifted on December 1, 2014 following our successful completion of testing and investigation requested by the FDA, the hold delayed the completion of our previously completed pivotal Phase 2b clinical trial and delayed the initiation of our pivotal Phase 3 clinical trial.

If initiation or completion of our clinical trials are delayed for any of the above reasons or other reasons, our development costs may increase, our approval process could be delayed and our ability to commercialize and

commence sales of our product candidates could be materially harmed, which could have a material adverse effect on our business.

The regulatory approval processes of the FDA is lengthy, time consuming and inherently unpredictable, and if we are ultimately unable to obtain regulatory approval for our product candidates or for Zilretta in additional indications, our business will be harmed.

The time required to obtain approval by the FDA and comparable foreign authorities is unpredictable but typically takes many years following the commencement of clinical trials and depends upon numerous factors, including the substantial discretion of the

regulatory authorities. In addition, approval policies, regulations, or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions. Although we received regulatory approval of Zilretta for the treatment of patients with OA of the knee, it is possible that none of our other product candidates will ever obtain regulatory approval or that we will not be able to obtain regulatory approval for Zilretta in additional indications.

Our product candidates could fail to receive regulatory approval for many reasons, including the following:

- the FDA or comparable foreign regulatory authorities may disagree with the design, scope or implementation of our clinical trials;
- we may be unable to demonstrate to the satisfaction of the FDA or comparable foreign regulatory authorities that a product candidate is safe and effective for its proposed indication;
- the results of clinical trials may not meet the level of statistical significance required by the FDA or comparable foreign regulatory authorities for approval;
- we may be unable to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;
- the FDA or comparable foreign regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials;
- the data collected from clinical trials of our product candidates may not be sufficient to support the submission of an NDA or other submission or to obtain regulatory approval in the United States or elsewhere;
- the FDA or comparable foreign regulatory authorities may fail to approve the manufacturing processes or facilities of third party manufacturers with which we contract for clinical and commercial supplies; and
- the approval policies or regulations of the FDA or comparable foreign regulatory authorities may change significantly in a manner rendering our clinical data insufficient for approval.

The lengthy approval process, as well as the unpredictability of future clinical trial results, may result in our failing to obtain regulatory approval to market Zilretta in additional indications or to market our other product candidates at all, which would harm our business, results of operations and prospects.

In addition, even if we were to obtain approval for other product candidates or for Zilretta in other indications, regulatory authorities may approve any of our product candidates for fewer or more limited indications than we request, may grant approval contingent on the performance of costly post-marketing clinical trials, or may approve a product candidate with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that product candidate. Any of the foregoing scenarios could harm the commercial prospects for our product candidates. For example, Zilretta has initially been approved for single-dose administration and is not intended for repeat administration, which may limit the extent to which payors reimburse Zilretta and physicians prescribe Zilretta to their patients. While we are conducting a repeat dose clinical trial and intend to use the resulting data to inform our clinical and regulatory perspectives and to create a basis for further interactions with the FDA. If we are unable to expand the label for Zilretta to include repeat dosing, our ability to fully market Zilretta may be limited.

Our product candidates may not receive regulatory approval despite success in clinical trials. If we do not receive regulatory approval for our product candidates, we may not be able to continue our operations. Even if we successfully obtain regulatory approval to market one or more of our product candidates, our revenue will be dependent, to a significant extent, upon the size of the markets in the territories for which we gain regulatory approval. If the markets for patients or indications that we are targeting are not as significant as we estimate, we may not generate significant revenue from sales of such products, if approved.

The FDA granted marketing approval of Zilretta for the treatment of patients with OA of the knee, and we could face liability if a regulatory authority determines that we are promoting Zilretta for any off-label uses.

A company may not promote “off-label” uses for its drug products. An off-label use is the use of a product for an indication that is not described in the product’s FDA-approved label in the United States or for uses in other jurisdictions that differ from those approved by the applicable regulatory agencies. Physicians, on the other hand, may prescribe products for off-label uses. Although the FDA and other regulatory agencies do not regulate a physician’s choice of drug treatment made in the physician’s independent medical judgment, they do restrict promotional communications from pharmaceutical companies or their sales force with respect to off-label uses of products for which marketing clearance has not been issued. A company that is found to have promoted off-label use of its product may be subject to significant liability, including civil and criminal sanctions. Once we begin marketing Zilretta, or if we market any other product, we intend to comply with the requirements and restrictions of the FDA and other regulatory agencies with respect to our promotion of our products, but we cannot be sure that the FDA or other regulatory agencies will agree that we have not violated their restrictions. For example, as part of our promotion strategy for Zilretta we intend to communicate certain results from

our Phase 3 clinical trial and other clinical data that are not included in the product label. While we intend to communicate this data in accordance with FDA guidance and applicable laws, we cannot be certain that the FDA or other regulatory agencies will agree with our use of this data or our sales force may use such data in a way that is inconsistent with our policies. As a result, we may be subject to criminal and civil liability. In addition, our management's attention could be diverted to handle any such alleged violations. A significant number of pharmaceutical companies have been the target of inquiries and investigations by various U.S. federal and state regulatory, investigative, prosecutorial and administrative entities in connection with the promotion of products for unapproved uses and other sales practices, including the Department of Justice and various U.S. Attorneys' Offices, the Office of Inspector General of the Department of Health and Human Services, the FDA, the Federal Trade Commission and various state Attorneys General offices. These investigations have alleged violations of various U.S. federal and state laws and regulations, including claims asserting antitrust violations, violations of the Federal Food, Drug, and Cosmetic Act, or the FDCA, the federal False Claims Act, the Prescription Drug Marketing Act, anti-kickback laws, and other alleged violations in connection with the promotion of products for unapproved uses, pricing and Medicare and/or Medicaid reimbursement. If the FDA or any other governmental agency initiates an enforcement action against us or if we are the subject of a qui tam suit and it is determined that we violated prohibitions relating to the promotion of products for unapproved uses, we could be subject to substantial civil or criminal fines or damage awards and other sanctions such as consent decrees and corporate integrity agreements pursuant to which our activities would be subject to ongoing scrutiny and monitoring to ensure compliance with applicable laws and regulations. Any such fines, awards or other sanctions would have an adverse effect on our revenue, business, financial prospects and reputation.

(*) Even though the FDA has granted approval of Zilretta for the treatment of patients with OA of the knee, the terms of the approval may limit its commercial potential. Additionally, Zilretta is still subject to substantial, ongoing regulatory requirements, and our other product candidates may face future development and regulatory difficulties.

Even though the FDA has granted approval of Zilretta, the scope and terms of the approval may limit our ability to commercialize Zilretta and, therefore, our ability to generate substantial sales revenues. The FDA has approved Zilretta only for the treatment of patients with OA of the knee. If any other ongoing clinical studies of Zilretta are negative, the FDA could decide to withdraw approval, add warnings or narrow the approved indication in the product label.

Zilretta and, if approved, our other product candidates, will also be subject to ongoing FDA requirements governing the labeling, packaging, storage, distribution, safety surveillance, advertising, promotion, record-keeping and reporting of safety and other post-market information. The holder of an approved NDA is obligated to monitor and report adverse events, or AEs, and any failure of a product to meet the specifications in the NDA. The holder of an approved NDA must also submit new or supplemental applications and obtain FDA approval for certain changes to the approved product, product labeling or manufacturing process. Advertising and promotional materials must comply with FDA rules and are subject to FDA review, in addition to other potentially applicable federal and state laws.

In addition, manufacturers of drug products and their facilities are subject to payment of user fees and continual review and periodic inspections by the FDA and other regulatory authorities for compliance with current good manufacturing practices, or cGMP, and adherence to commitments made in the NDA. If we or a regulatory agency discovers previously unknown problems with a product, such as AEs of unanticipated severity or frequency, or problems with the facility where the product is manufactured, a regulatory agency may impose restrictions relative to that product or the manufacturing facility, including requiring recall or withdrawal of the product from the market or suspension of manufacturing.

We rely on third party collaborators to assist us in meeting our reporting and related obligations. While we work closely with these third parties, we do not control all of their activities. If our third party collaborators do not meet the relevant commitments, we may fail to meet our applicable regulatory requirements.

If we fail to comply with applicable regulatory requirements following approval of a product candidate, including Zilretta, a regulatory agency may:

- issue a warning letter asserting that we are in violation of the law;
- seek an injunction or impose civil or criminal penalties or monetary fines;
- suspend or withdraw regulatory approval;
- suspend any ongoing clinical trials;
- refuse to approve a pending NDA or supplements to an NDA submitted by us;
- seize product; or
- refuse to allow us to enter into supply contracts, including government contracts.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response and could generate negative publicity. The occurrence of any event or penalty described above may inhibit our ability to commercialize our products and generate revenue.

(*) Any relationships with healthcare professionals, principal investigators, consultants, actual and potential customers, and third-party payors in connection with our current and future business activities are and will continue to be subject, directly or indirectly, to federal and state healthcare laws. If we are unable to comply, or have not fully complied, with such laws, we could face criminal sanctions, civil penalties, administrative penalties, contractual damages, reputational harm, diminished profits and future earnings, and curtailment or restructuring of our operations.

Our operations may be directly or indirectly subject to various federal and state healthcare laws, including without limitation, fraud and abuse laws, false claims laws, marketing expenditure tracking and disclosure (or "sunshine") laws, government price reporting, and health information privacy and security laws. Once we begin commercializing Zilretta in the United States with our newly installed sales force, and any other product candidates for which we obtain FDA approval, our potential exposure under such laws will increase significantly, and our costs associated with compliance are also likely to increase. These laws may impact, among other things, our current activities with investigators and research subjects, as well as proposed sales, marketing, promotion, manufacturing, distribution, pricing, discounting, customer, incentive programs, education programs and other business arrangements and activities. In addition, we may be subject to patient privacy regulation by the federal government and by the U.S. states and foreign jurisdictions in which we conduct our business. The laws that may affect our ability to operate include, but are not limited to:

- the federal Anti-Kickback Statute, which prohibits, among other things, individuals and entities from knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual, or the purchase, order or recommendation of an item or service for which payment may be made under a federal healthcare program, such as the Medicare and Medicaid programs;
- federal civil and criminal false claims laws and civil monetary penalties laws, including the civil False Claims Act, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, to the federal government claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which imposes criminal and civil liability for, among other things, executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;
- HIPAA, as amended by the Health Information Technology and Clinical Health Act of 2009, and their respective implementing regulations, which impose requirements on certain covered healthcare providers, health plans, and healthcare clearinghouses as well as their business associates that perform services involving the use or disclosure of individually identifiable health information, relating to the privacy, security and transmission of individually identifiable health information;
- the federal Open Payments program, created under Section 6002 of the PPACA, and its implementing regulations, which requires manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) to report annually to CMS information related to "payments or other transfers of value" made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, and applicable manufacturers and applicable group purchasing organizations to report annually to CMS ownership and investment interests held by physicians (as defined above) and their immediate family members;
- state and foreign law equivalents of each of the above federal laws and regulations, such as anti-kickback and false claims laws which may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by any third-party payor, including commercial insurers; state and foreign laws that require

pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government or otherwise restrict payments that may be made to healthcare providers; state and foreign laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures; and state and foreign laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, and often are not preempted by HIPAA, thus complicating compliance efforts;

- the Foreign Corrupt Practices Act, a U.S. law which regulates certain financial relationships with foreign government officials (which could include, for example, certain medical professionals);
- federal and state consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers; and

- state and federal government price reporting laws that require us to calculate and report complex pricing metrics to government programs, where such reported prices may be used in the calculation of reimbursement, rebates and/or discounts on our marketed drugs (participation in these programs and compliance with the applicable requirements may subject us to potentially significant discounts on our products, increased infrastructure costs, and potentially limit our ability to offer certain marketplace discounts).

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations may involve substantial costs. It is possible that governmental and enforcement authorities will conclude that our business practices, including activities undertaken by third parties on our behalf, may not comply with current or future statutes, regulations or case law interpreting applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including, without limitation, civil, criminal, and administrative penalties, damages, fines, disgorgement, imprisonment, possible exclusion from participation in Medicare, Medicaid and other government healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, additional reporting requirements and/or oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, and curtailment or restructuring of our operations. Moreover, while we do not bill third-party payors directly and our customers make the ultimate decision on how to submit claims, from time-to-time we may provide reimbursement guidance to patients and healthcare providers. If a government authority were to conclude that we provided improper advice and/or encouraged the submission of a false claim for reimbursement, we could face action against us by government authorities. If any of the physicians or other providers or entities with whom we do business is found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs and imprisonment. If any of the above occur, it could adversely affect our ability to operate our business and our results of operations. In addition, the approval and commercialization of any of our product candidates outside of the United States will also likely subject us to foreign equivalents of the healthcare laws mentioned above, among other foreign laws.

(*) If we fail to develop, acquire or in-license other potential future product candidates or products, our business and prospects will be limited.

Our long-term growth strategy is to develop, acquire or in-license and commercialize a portfolio of potential future product candidates in addition to Zilretta. Our primary means of expanding our pipeline of product candidates is to develop improved formulations and delivery methods for existing FDA-approved products and/or select and acquire or in-license product candidates for the treatment of therapeutic indications that complement or augment our current pipeline, or that otherwise fit into our development or strategic plans on terms that are acceptable to us. Developing new formulations or delivery methods of existing or potential future product candidates or identifying, selecting and acquiring or in-licensing promising product candidates requires substantial technical, financial and human resources expertise. Efforts to do so may not result in the actual development, acquisition or in-license of a particular product candidate, potentially resulting in a diversion of our management's time and the expenditure of our resources with no resulting benefit. If we are unable to add additional product candidates to our pipeline, our long-term business and prospects will be limited.

Risks Related to Our Reliance on Third Parties

We rely completely on third parties to manufacture our commercial supplies of Zilretta and our preclinical and clinical drug supplies for our other product candidates.

If we were to experience an unexpected loss of supply of Zilretta or our other product candidates for any reason, whether as a result of manufacturing, supply or storage issues or otherwise, we could experience disruptions in commercial supply of Zilretta or delays, suspensions or terminations of clinical trials or regulatory submissions. We

do not currently have nor do we plan to acquire the infrastructure or capability internally to manufacture our preclinical and clinical drug supplies and we lack the resources and the capability to manufacture any of our product candidates on a clinical or commercial scale. The facilities used by our contract manufacturers or other third party manufacturers to manufacture our products and product candidates, including Patheon with respect to supplies of Zilretta, must obtain and maintain approval by the FDA. While we work closely with our third party manufacturers on the manufacturing process for our products and product candidates, including quality audits, we generally do not control the implementation of the manufacturing process of, and are completely dependent on, our contract manufacturers or other third party manufacturers for compliance with cGMP regulatory requirements and for manufacture of both active drug substances and finished drug products. If our contract manufacturers or other third party manufacturers cannot successfully manufacture material that conforms to applicable specifications and the strict regulatory requirements of the FDA or others, they will not be able to secure and/or maintain regulatory approval for their manufacturing facilities.

In addition, we have no control over the ability of our contract manufacturers or other third party manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA or a comparable foreign regulatory authority does not approve these facilities for the manufacture of our products and product candidates or if it withdraws any such approval in the future, we may

need to find alternative manufacturing facilities, which would significantly impact our ability to commercialize, develop, or obtain or maintain regulatory approval for our products and product candidates.

We are particularly reliant on Patheon with respect to maintaining Zilretta manufacturing suites. These Patheon facilities had to be approved by the FDA as a condition to regulatory approval for Zilretta, as we rely exclusively on Patheon for commercial supplies of Zilretta. In addition, because Patheon manufactures Zilretta in the United Kingdom, or U.K., it will need to maintain and update its facility license with the applicable U.K. regulatory agencies and any delay or inability to do so would delay or prevent Patheon from being able to produce commercial supplies of Zilretta. Furthermore, the manufacturing process for Zilretta is unique and involves specialized equipment and proprietary processes, which subjects us to heighted risks that Patheon will experience delays in the manufacturing process.

We also rely on our manufacturers to purchase from third party suppliers the materials necessary to produce our product candidates for our clinical trials. There are a limited number of suppliers for raw materials that we use to manufacture our drugs and we may need to assess alternate suppliers to prevent a possible disruption of the manufacture of the materials necessary to produce our product candidates for our clinical trials and for commercial sale of Zilretta. We do not have any control over the process or timing of the acquisition of these raw materials by our manufacturers. Moreover, we currently do not have any agreements for the commercial production of these raw materials. Although we generally do not begin a clinical trial unless we believe we have a sufficient supply of a product candidate to complete the clinical trial, any significant delay in the supply of a product candidate, or the raw material components thereof, for an ongoing clinical trial due to the need to replace a contract manufacturer or other third party manufacturer could considerably delay completion of our clinical trials, product testing and potential regulatory approval of our product candidates. If our manufacturers or we are unable to purchase these raw materials for Zilretta or for any other approved products, there would be a shortage in supply, which would impair our ability to generate revenue from the sale of our products, including Zilretta.

We expect to continue to depend on contract manufacturers or other third party manufacturers for the foreseeable future. We have entered into long-term commercial supply agreements with our current contract manufacturers in order to maintain adequate supplies to manufacture finished Zilretta drug product. We may, however, be unable to enter into such agreements or do so on commercially reasonable terms for potential future product candidates, which could have a material adverse impact upon our business.

We rely on certain sole sources of supply for our product candidates and any disruption in the chain of supply may cause delay in developing, obtaining approval for, and commercializing our product candidates, including Zilretta.

Currently, we use the following sole sources of supply for manufacturing Zilretta: Farmabios SpA for TA, Evonik Corporation for PLGA, and Patheon for finished microspheres drug product. Because of the unique equipment and process for loading TA onto PLGA microspheres, transferring finished drug product manufacturing activities for Zilretta to an alternate supplier would be a time-consuming and costly endeavor, and there are only a limited number of manufacturers that we believe are capable of performing this function for us. Switching Zilretta finished drug suppliers may involve substantial cost and could result in a delay in our desired commercial timeline. For Zilretta, we expect that for the foreseeable future Patheon will be the only manufacturer qualified as a commercial supplier with the FDA. As a result, if supply from Patheon is interrupted, there could be a significant disruption in commercial supply. Any alternative vendor would need to be qualified through an NDA supplement, which could result in further delay. The FDA or other regulatory agencies outside of the United States may also require additional studies if a new Zilretta supplier is relied upon for commercial production.

These factors could cause the delay of clinical trials, regulatory submissions, required approvals or commercialization of Zilretta or any of our other product candidates, cause us to incur higher costs and prevent us from commercializing

them successfully. Furthermore, if our suppliers fail to deliver the required commercial quantities of active pharmaceutical ingredient on a timely basis and at commercially reasonable prices and we are unable to secure one or more replacement suppliers capable of production at a substantially equivalent cost, our clinical trials may be delayed or we could lose potential revenue in the event of a product stockout for Zilretta or any of our other product candidate that is approved and launched.

Manufacturing issues may arise that could increase product and regulatory approval costs or disrupt or delay commercialization.

As we scale up manufacturing of our products and product candidates, we may encounter product, packaging, equipment and process-related issues that may require refinement or resolution in order to proceed with our planned clinical trials and obtain or maintain regulatory approval for commercial marketing. In the future, we may identify impurities or other product related issues, which could result in increased scrutiny by regulatory authorities, suspensions of commercial activities or product recalls, delays in our clinical program and regulatory approval, increases in our operating expenses, or failure to obtain or maintain approval for our products or product candidates.

We rely on third parties to conduct our preclinical studies and clinical trials. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may not be able to obtain regulatory approval for or commercialize our product candidates and our business could be substantially harmed.

We rely upon and plan to continue to rely upon third party CROs to monitor and manage data for our preclinical and clinical programs. We rely on these parties for execution of our preclinical studies and clinical trials, and control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that each of our trials is conducted in accordance with the applicable protocol, legal, regulatory and scientific standards and our reliance on the CROs does not relieve us of our regulatory responsibilities. We and our CROs are required to comply with FDA laws and regulations regarding current good clinical practice, or GCP, which are also required by the Competent Authorities of the Member States of the European Economic Area and comparable foreign regulatory authorities in the form of International Council on Harmonization guidelines for all of our products in clinical development. Regulatory authorities enforce GCP through periodic inspections of trial sponsors, principal investigators and trial sites. If we or any of our CROs fail to comply with applicable GCP, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that upon inspection by a given regulatory authority, such regulatory authority will determine that any of our clinical trials comply with GCP regulations. In addition, our clinical trials must be conducted with product produced under cGMP regulations. While we have agreements governing activities of our CROs, we have limited influence over their actual performance. In addition, portions of the clinical trials for our product candidates are being conducted outside of the United States, which will make it more difficult for us to monitor CROs and perform visits of our clinical trial sites and will force us to rely heavily on CROs to ensure the proper and timely conduct of our clinical trials and compliance with applicable regulations, including GCP. Failure to comply with applicable regulations in the conduct of the clinical trials for our product candidates may require us to repeat clinical trials, which would delay the regulatory approval process.

Some of our CROs have an ability to terminate their respective agreements with us if, among other reasons, it can be reasonably demonstrated that the safety of the subjects participating in our clinical trials warrants such termination, if we make a general assignment for the benefit of our creditors or if we are liquidated. If any of our relationships with these third party CROs terminate, we may not be able to enter into arrangements with alternative CROs or to do so on commercially reasonable terms. In addition, our CROs are not our employees, and except for remedies available to us under our agreements with such CROs, we cannot control whether or not they devote sufficient time and resources to our preclinical and clinical programs. If CROs do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols, regulatory requirements or for other reasons, our clinical trials may be extended, delayed or terminated and we may not be able to obtain regulatory approval for or successfully commercialize our product candidates. Consequently, our results of operations and the commercial prospects for our product candidates would be harmed, our costs could increase substantially and our ability to generate revenue could be delayed significantly.

Switching or adding additional CROs involves additional cost and requires management time and focus. In addition, there is a natural transition period when a new CRO commences work. As a result, delays occur, which can materially impact our ability to meet our desired clinical development timelines. Though we carefully manage our relationships with our CROs, there can be no assurance that we will not encounter challenges or delays in the future or that these delays or challenges will not have a material adverse impact on our business, financial condition and prospects.

We may not be successful in establishing development and commercialization collaborations, which could adversely affect, and potentially prohibit, our ability to fully commercialize Zilretta or to develop our product candidates.

Because developing pharmaceutical products, conducting clinical trials, obtaining regulatory approval, establishing manufacturing capabilities and marketing approved products are expensive, we are exploring collaborations with third parties outside of the United States that have more resources and experience. For example, we are exploring selective

partnerships with third parties for Zilretta's development and commercialization outside of the United States. If we are unable to obtain a partner for Zilretta, we may be unable to advance the development of Zilretta in territories outside of the United States, which may limit its market potential. In situations where we enter into a development and commercial collaboration arrangement for a product candidate, we may also seek to establish additional collaborations for development and commercialization in territories outside of those addressed by the first collaboration arrangement for such product candidate. If any of our product candidates, in addition to Zilretta, receives marketing approval, we may enter into sales and marketing arrangements with third parties with respect to otherwise unlicensed or unaddressed territories outside of the United States. There are a limited number of potential partners, and we expect to face competition in seeking appropriate partners. If we are unable to enter into any development and commercial collaborations and/or sales and marketing arrangements on acceptable terms, or at all, we may be unable to successfully develop and seek regulatory approval for our product candidates and/or effectively market and sell Zilretta and any other future approved products, if any, in all of the territories outside of the United States where it may otherwise be valuable to do so.

We may not be successful in maintaining development and commercialization collaborations, and our partners may not devote sufficient resources to the development or commercialization of our products or product candidates or may otherwise fail in development or commercialization efforts, which could adversely affect our ability to develop or commercialize certain of our products or product candidates and our financial condition and operating results.

Even if we are able to establish collaboration arrangements, any such collaboration may not ultimately be successful, which could have a negative impact on our business, results of operations, financial condition and growth prospects. If we partner with a third party for development and commercialization of a product candidate, we can expect to relinquish some or all of the control over the future success of that product candidate to the third party. It is possible that a partner may not devote sufficient resources to the development or commercialization of our product candidate or may otherwise fail in development or commercialization efforts, in which event the development and commercialization of such product candidate could be delayed or terminated and our business could be substantially harmed. In addition, the terms of any collaboration or other arrangement that we establish may not prove to be favorable to us or may not be perceived as favorable, which may negatively impact the trading price of our common stock. In some cases, we may be responsible for continuing development of a product or product candidate or research program under collaboration and the payment we receive from our partner may be insufficient to cover the cost of this development. Moreover, collaborations and sales and marketing arrangements are complex and time consuming to negotiate, document and implement and they may require substantial resources to maintain.

We may become subject to a number of additional risks associated with our dependence on collaborations with third parties, the occurrence of which could cause our collaboration arrangements to fail. Conflicts may arise between us and partners, such as conflicts concerning the interpretation of clinical data, the achievement of milestones, the division of development or commercialization responsibilities or expenses, the interpretation of financial provisions or the ownership of intellectual property developed during the collaboration. If any such conflicts arise, a partner could act in its own self-interest, which may be adverse to our best interests. Any such disagreement between us and a partner could result in one or more of the following, each of which could delay or prevent the development or commercialization of our products or product candidates, and in turn prevent us from generating sufficient revenue to achieve or maintain profitability:

- reductions in the payment of royalties or other payments we believe are due pursuant to the applicable collaboration arrangement;
- actions taken by a partner inside or outside our collaboration which could negatively impact our rights or benefits under our collaboration; or
- unwillingness on the part of a partner to keep us informed regarding the progress of its development and commercialization activities or to permit public disclosure of the results of those activities.

Risks Related to Our Business Operations and Industry

Our future success depends on our ability to retain key executives and to attract, retain and motivate qualified personnel.

We are highly dependent on the principal members of our executive team, the loss of whose services may adversely impact the achievement of our objectives. While we have entered into employment agreements or offer letters with each of our executive officers, any of them could leave our employment at any time, as all of our employees are “at will” employees. Recruiting and retaining other qualified employees for our business, including scientific and technical personnel, will also be critical to our success. There is currently a shortage of skilled executives in our industry, which is likely to continue. As a result, competition for skilled personnel is intense and the turnover rate can be high. For example, Yamo Deniz, M.D., our Chief Medical Officer, is currently on short-term disability for personal reasons. While other members of our management team have assumed Dr. Deniz’s primary responsibilities during his absence, we do not know when or if Dr. Deniz will resume his position with us and we may be required to recruit a long-term replacement for the position. We may not be able to attract and retain personnel on acceptable terms given the competition among numerous pharmaceutical companies for individuals with similar skill sets. In addition, failure to

succeed in clinical studies may make it more challenging to recruit and retain qualified personnel. The inability to recruit or the loss of the services of any executive or key employee might impede the progress of our development and commercialization objectives.

(*) We have recently undergone a significant expansion of our organization, and we may experience difficulties in managing this growth, which could disrupt our operations.

As of September 30, 2017, we had 139 full-time employees. Following the approval of Zilretta in the United States, we hired a sales force of approximately 100 additional full-time employees. In addition, as our company matures, we expect to further expand our employee base to increase our managerial, scientific and engineering, operational, sales, marketing, financial and other resources and to hire more consultants and contractors. This growth will impose significant additional responsibilities on our management, including the need to identify, recruit, maintain, motivate and integrate additional employees, consultants and contractors. Also, our management may need to divert a disproportionate amount of its attention away from our day-to-day activities and devote a

substantial amount of time to managing these growth activities. We may not be able to effectively manage the expansion of our operations, which may result in weaknesses in our infrastructure, give rise to operational mistakes, loss of business opportunities, loss of employees and reduced productivity among remaining employees. Future growth could require significant capital expenditures and may divert financial resources from other projects, such as the development of our existing or future product candidates. If our management is unable to effectively manage our growth, our expenses may increase more than expected, our ability to generate and/or grow revenue could be reduced, and we may not be able to implement our business strategy. Our future financial performance and our ability to successfully commercialize Zilretta and, if approved, our other product candidates, and compete effectively will depend, in part, on our ability to effectively manage our recent and future growth.

We face potential product liability, and, if successful claims are brought against us, we may incur substantial liability.

The use of our product candidates in clinical trials and the sale of Zilretta and any other products for which we obtain marketing approval exposes us to the risk of product liability claims. Product liability claims might be brought against us by consumers, healthcare providers, pharmaceutical companies or others selling or otherwise coming into contact with our product candidates. If we cannot successfully defend against product liability claims, we could incur substantial liability and costs. In addition, regardless of merit or eventual outcome, product liability claims may result in:

- impairment of our business reputation and perception of our products in the market;
- withdrawal or suspension of marketing approvals;
- withdrawal of clinical trial participants;
- costs due to related litigation;
- distraction of management's attention from our primary business;
- substantial monetary awards to patients or other claimants;
- the inability to commercialize our product candidates; and
- decreased demand for our products approved for commercial sale.

Our current product liability insurance coverage may not be sufficient to reimburse us for any expenses or losses we may suffer. Moreover, insurance coverage is becoming increasingly expensive and in the future we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability. On occasion, large judgments have been awarded in class action lawsuits based on drugs that had unanticipated adverse effects. A successful product liability claim or series of claims brought against us could cause our stock price to decline and, if judgments exceed our insurance coverage, could adversely affect our results of operations and business.

If we obtain approval to commercialize any approved products outside of the United States, a variety of risks associated with international operations could materially adversely affect our business.

We plan to enter into agreements with third parties to market Zilretta, and if approved, our other product candidates, outside of the United States. We expect that we will be subject to additional risks related to entering into international business relationships, including:

- different regulatory requirements for drug approvals in foreign countries;
- reduced protection for intellectual property rights;
- unexpected changes in tariffs, trade barriers and regulatory requirements;
- economic weakness, including inflation, or political instability in particular foreign economies and markets;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- foreign taxes, including withholding of payroll taxes;
-

foreign currency fluctuations, which could result in increased operating expenses and reduced revenue, and other obligations incidental to doing business in another country;

- workforce uncertainty in countries where labor unrest is more common than in the United States;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; and
- business interruptions resulting from geopolitical actions, including war and terrorism, or natural disasters, including earthquakes, typhoons, floods and fires.

We rely significantly on information technology and any failure, inadequacy, interruption or security lapse of that technology, including any cybersecurity incidents, could harm our ability to operate our business effectively.

Despite the implementation of security measures, our internal computer systems and those of third parties with which we contract are vulnerable to damage from cyber-attacks, computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. System failures, accidents or security breaches could cause interruptions in our operations, and could result in a material disruption of our commercial and clinical activities and business operations, in addition to possibly requiring substantial expenditures of resources to remedy. The loss of clinical trial data could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and our development programs and the development of our product candidates could be delayed.

Business interruptions could delay us in the process of developing or commercializing our products and product candidates.

Our headquarters are located in Burlington, Massachusetts. We are vulnerable to natural disasters such as hurricanes, tornadoes and severe storms, as well as other events that could disrupt our operations. We do not carry insurance for natural disasters and we may not carry sufficient business interruption insurance to compensate us for losses that may occur. Any losses or damages we incur could have a material adverse effect on our business operations.

Risks Related to Our Intellectual Property

(*) If we are unable to obtain or protect intellectual property rights related to our products and product candidates, we may not be able to compete effectively in our market.

We rely upon a combination of patents, trade secret protection, confidentiality agreements and proprietary know how, and intend to seek marketing exclusivity for any approved product, including Zilretta, in order to protect the intellectual property related to our products and product candidates, and to date we have three issued patents covering Zilretta in the United States. The strength of patents in the biotechnology and pharmaceutical field involves complex legal and scientific questions and can be uncertain. The patent applications that we own or in-license may fail to result in issued patents with claims that cover our products and product candidates in the United States or in other foreign countries. Even for our issued patents and if other patents do successfully issue, third parties may challenge their validity, enforceability or scope, which may result in such patents being narrowed or invalidated. If this were to occur, early generic competition could be expected against Zilretta and potentially our product candidates in development. Also, a third party may challenge our ownership of patents and patent applications assigned to us, or may challenge our exclusive rights to patents and patent applications that we license from third parties. Furthermore, even if they are unchallenged, our patents and patent applications may not adequately protect our intellectual property or prevent others from designing around our claims. If the additional patent applications we hold with respect to Zilretta or our product candidates fail to issue or if their breadth or strength of protection is threatened, it could dissuade companies from collaborating with us to develop them and threaten our ability to commercialize any resulting products. We cannot offer any assurances about which, if any, patents will issue or whether any issued patents will not be found invalid and unenforceable or will go unthreatened by third parties. Further, if we encounter delays in regulatory approvals for additional indications or in additional jurisdictions, the period of time during which we could market Zilretta or any product candidate under patent protection could be reduced. Furthermore, patent applications by third parties can result in an interference proceeding in the United States being provoked by a third party or instituted by us to determine who was the first to invent any of the subject matter covered by the patent claims of our applications. See “Business—Patents and Patent Applications” in our Annual Report on Form 10-K for additional information regarding our material patents and patent applications.

In addition to the protection afforded by patents, we rely on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable, processes for which patents are difficult to enforce and any other elements of our drug development process that involve proprietary know-how, information or technology that is not covered by patents. For example, we maintain trade secrets with respect to certain of the formulation and manufacturing techniques related to the TA-formulated PLGA microspheres in Zilretta, including those that relate to precise pharmaceutical release. Although we generally require all of our employees to assign their inventions to us, and all of our employees, consultants, advisors and any third parties who have access to our proprietary know-how, information or technology to enter into confidentiality agreements, we cannot provide any assurances that all such agreements have been duly executed or that our trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Further, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws of the United States. As a result, we may encounter significant problems in protecting and defending our intellectual property both in the United States and abroad. If we are unable to prevent material disclosure of the non-patented intellectual property related to our technologies to third parties, and there is no guarantee that we will have any such enforceable trade secret protection, we may not be able to establish or maintain a competitive advantage in our market, which could materially adversely affect our business, results of operations and financial condition.

Third party claims of intellectual property infringement may prevent or delay our development and commercialization efforts.

Our commercial success depends in part on our avoiding infringement of the patents and proprietary rights of third parties. There is a substantial amount of litigation, both within and outside the United States, involving patent and other intellectual property rights in the biotechnology and pharmaceutical industries, including patent infringement lawsuits, interferences, oppositions and inter party reexamination proceedings before the U.S. PTO. Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we and our collaborators are commercializing or developing product candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that our products and product candidates may be subject to claims of infringement of the patent rights of third parties.

Third parties may assert that we are employing their proprietary technology without authorization. There may be third-party patents or patent applications with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of Zilretta and/or our product candidates. Because patent applications can take many years to issue, there may be currently pending patent applications which may later result in issued patents that our products or product candidates may infringe. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. If any third-party patents were held by a court of competent jurisdiction to cover the manufacturing process of any of our products or product candidates, any drug substance formed during the manufacturing process or any final product itself, the holders of any such patents may be able to block our ability to commercialize such product or product candidate unless we obtain a license under the applicable patents, or until such patents expire. Similarly, if any third party patent were held by a court of competent jurisdiction to cover aspects of our formulations or methods of use, the holders of any such patent may be able to block our ability to develop and commercialize the applicable product or product candidate unless we obtain a license or until such patent expires. In either case, such a license may not be available on commercially reasonable terms or at all.

Parties making claims against us may request and/or obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize one or more of our products or product candidates. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, obtain one or more licenses from third parties, pay royalties or redesign our infringing products or manufacturing processes, which may be impossible or require substantial time and monetary expenditure. We cannot predict whether any such license would be available at all or whether it would be available on commercially reasonable terms. Furthermore, even in the absence of litigation, we may need to obtain licenses from third parties to advance our research, manufacture clinical trial supplies or allow commercialization of our product candidates. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, if at all. In that event, we would be unable to further develop and commercialize one or more of our products or product candidates, which could harm our business significantly. We cannot provide any assurances that third party patents do not exist which might be enforced against our products, resulting in either an injunction prohibiting our sales, or, with respect to our sales, an obligation on our part to pay royalties and/or other forms of compensation to third parties.

We may be involved in lawsuits to protect or enforce our patents or the patents of our licensors, which could be expensive, time consuming and unsuccessful.

Competitors may infringe our patents or the patents of our licensors. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming. In addition, in an infringement proceeding, a court may decide that a patent of ours or our licensors is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation or defense proceedings could put one or more of our patents

at risk of being invalidated or interpreted narrowly and could put our patent applications at risk of not issuing.

Interference proceedings provoked by third parties or brought by us may be necessary to determine the priority of inventions with respect to our patents or patent applications or those of our collaborators or licensors. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms. Our defense of litigation or interference proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees. We may not be able to prevent, alone or with our licensors, misappropriation of our intellectual property rights, particularly in countries where the laws may not protect those rights as fully as in the United States.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of our common stock.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submissions, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees on any issued patent are due to be paid to the U.S. PTO and foreign patent agencies in several stages over the lifetime of the patent. The U.S. PTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we or our licensors that control the prosecution and maintenance of our licensed patents fail to maintain the patents and patent applications covering our product candidates, our competitors might be able to enter the market, which would have a material adverse effect on our business.

We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties.

We employ individuals who were previously employed at other biotechnology or pharmaceutical companies. We may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed confidential information of our employees' former employers or other third parties. We may also be subject to claims that former employers or other third parties have an ownership interest in our patents. Litigation may be necessary to defend against these claims. There is no guarantee of success in defending these claims, and if we are successful, litigation could result in substantial cost and be a distraction to our management and other employees.

Risks Related to Ownership of Our Common Stock

The market price of our common stock may be highly volatile, you may not be able to resell your shares at a desired market price and you could lose all or part of your investment.

The trading price of our common stock is likely to be volatile. Our stock price could be subject to wide fluctuations in response to a variety of factors, including the following:

- the success or perceived success of the commercial launch of Zilretta;
- failure to successfully develop and commercialize additional product candidates;
- adverse results or delays in clinical trials;
- inability to obtain additional funding;
- changes in laws or regulations applicable to our products or product candidates;
- inability to obtain adequate product supply for our products or product candidates, or the inability to do so at acceptable prices;
- adverse regulatory decisions;
- introduction of new products or technologies by our competitors;
- failure to meet or exceed product development or financial projections we provide to the public;
- failure to meet or exceed the estimates and projections of the investment community;
- the perception of the pharmaceutical industry by the public, legislatures, regulators and the investment community;
-

announcements of significant acquisitions, strategic partnerships, joint ventures or capital commitments by us or our competitors;

- disputes or other developments relating to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;
- additions or departures of key scientific or management personnel;
- significant lawsuits, including patent, product liability or stockholder litigation;
- changes in the market valuations of similar companies;

- sales of our common stock by us or our stockholders in the future; and
- trading volume of our common stock.

In addition, the stock market in general, and the Nasdaq Global Market in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance.

Our principal stockholders and management own a significant percentage of our stock and are able to exert significant control over matters subject to stockholder approval.

As of December 31, 2016, our executive officers, directors and stockholders affiliated with our officers and directors beneficially owned approximately 17.1% of our voting stock. Therefore, these stockholders may have the ability to influence us through this ownership position. These stockholders may be able to determine or significantly influence all matters requiring stockholder approval. For example, these stockholders, acting together, may be able to control or significantly influence elections of directors, amendments of our organizational documents, or approval of any merger, sale of assets, or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals or offers for our common stock that you may believe are in your best interest as one of our stockholders.

We are an “emerging growth company,” and we cannot be certain if the reduced reporting requirements applicable to emerging growth companies will make our common stock less attractive to investors.

We are an “emerging growth company,” as defined in the Jumpstart Our Business Startup Act, or JOBS Act. For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not “emerging growth companies,” including exemption from compliance with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a non-binding advisory vote on executive compensation. We will remain an emerging growth company until the earlier of (a) the last day of the fiscal year in which we have total annual gross revenue of at least $1 billion, (b) December 31, 2019, (c) the date on which we are deemed to be a large accelerated filer, which would occur at the beginning of a year if the market value of our common stock that is held by non-affiliates exceeds $700 million as of the prior June 30th, and (d) the date on which we have issued more than $1 billion in non-convertible debt during the prior three-year period.

Even after we no longer qualify as an emerging growth company, we may still qualify as a “smaller reporting company” which would allow us to take advantage of many of the same exemptions from disclosure requirements including exemption from compliance with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act and reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements. We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

Under the JOBS Act, emerging growth companies can also delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud. As a result, stockholders could lose confidence in our financial and other public reporting, which would harm our business and the trading price of our common stock.

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures, are designed to prevent fraud. Any failure to implement required new or improved controls, or difficulties encountered in their implementation could cause us to fail to meet our reporting obligations. In addition, any testing by us conducted in connection with Section 404 of the Sarbanes-Oxley Act, or the subsequent testing by our independent registered public accounting firm, may reveal deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses or that may require prospective or retroactive changes to our consolidated financial statements or identify other areas for further attention or improvement. Inferior internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our common stock.

We will continue to incur significant increased costs as a result of operating as a public company, and our management is required to devote substantial time to new compliance initiatives.

We completed our initial public offering on February 18, 2014. As a public company, we incur significant legal, accounting and other expenses that we did not incur as a private company. For example, we are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, which require, among other things, that we file with the SEC annually, quarterly and current reports with respect to our business and financial condition. We have incurred and will continue to incur costs associated with the preparation and filing of these reports. In addition, the Sarbanes-Oxley Act, as well as rules subsequently implemented by the SEC, and the Nasdaq Global Market have imposed various other requirements on public companies. In July 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, was enacted. There are significant corporate governance and executive compensation related provisions in the Dodd-Frank Act that require the SEC to adopt additional rules and regulations in these areas such as "say on pay" and proxy access. Stockholder activism, the current political environment and the current high level of government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact (in ways we cannot currently anticipate) the manner in which we operate our business. Our management and other personnel devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations have and will continue to increase our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, these rules and regulations have made it more difficult and more expensive for us to obtain director and officer liability insurance and we may be required to incur substantial costs to maintain our current levels of such coverage.

Sales of a substantial number of shares of our common stock in the public market by our existing stockholders could cause our stock price to fall.

Sales of a substantial number of shares of our common stock in the public market or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity and/or convertible debt securities. We are unable to predict the effect that sales may have on the prevailing market price of our common stock.

Future sales and issuances of our common stock or rights to purchase common stock, including pursuant to our equity incentive plans, could result in additional dilution of the percentage ownership of our stockholders and could cause our stock price to fall.

We may need significant additional capital in the future to continue our planned operations. To the extent we raise additional capital by issuing equity securities; our stockholders may experience substantial dilution. We may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time. If we sell common stock, convertible securities or other equity securities in more than one transaction, investors may be materially diluted by subsequent sales. These sales may also result in material dilution to our existing stockholders, and new investors could gain rights superior to our existing stockholders.

Pursuant to our 2013 equity incentive plan, our management is authorized to grant stock options and other equity-based awards to our employees, directors and consultants. The number of shares available for future grant under the 2013 plan will automatically increase each year by 4% of all shares of our capital stock outstanding as of December 31 of the prior calendar year, subject to the ability of our board of directors to take action to reduce the size of the increase in any given year. Currently, we plan to register the increased number of shares available for issuance under the 2013 plan each year. If our board of directors elects to increase the number of shares available for future grant by the maximum amount each year, our stockholders may experience additional dilution, which could cause our stock price to fall.

We are at risk of securities class action litigation.

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because pharmaceutical companies have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management's attention and resources, which could harm our business.

Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.

Section 382 of the Internal Revenue Code of 1986, as amended, or Section 382, contains rules that limit the ability of a company that undergoes an ownership change to utilize its net operating losses, or NOLs, and tax credits existing as of the date of such ownership change. Under the rules, such an ownership change is generally any change in ownership of more than 50% of a company's stock within a rolling three-year period. The rules generally operate by focusing on changes in ownership among stockholders considered by the rules as owning, directly or indirectly, 5% or more of the stock of a company and any change in ownership arising from new

issuances of stock by the company. During the quarter ended June 30, 2014, we completed a Section 382 study through February 11, 2014. The results of this study showed that as of February 11, 2014, one historical ownership change within the meaning of Section 382 had occurred in 2009. As a result of this Section 382 limitation, approximately $0.3 million of NOLs will expire unutilized. In addition, we completed another Section 382 study through December 31, 2014. The results of this study showed that we experienced an ownership change in 2014 as part of the follow-on offering, however, none of the NOLs will expire due to the Section 382 limitation associated with the ownership change, assuming sufficient future taxable income and no future limitations. Subsequent ownership changes as defined by Section 382 may further limit the amount of NOL carryforwards that could be utilized annually to offset future taxable income.

We do not intend to pay dividends on our common stock so any returns will be limited to the value of our stock.

We have never declared or paid any cash dividend on our common stock. We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Additionally, our credit and security agreement with MidCap and Silicon Valley Bank contains covenants that restrict our ability to pay dividends. Any return to stockholders will therefore be limited to the appreciation of their stock.

Provisions in our amended and restated certificate of incorporation and bylaws, as well as provisions of Delaware law, could make it more difficult for a third party to acquire us or increase the cost of acquiring us, even if doing so would benefit our stockholders, and may prevent or frustrate attempts by our stockholders to replace or remove our current management.

Some provisions of our charter documents and Delaware law may have anti-takeover effects that could discourage an acquisition of us by others, even if an acquisition would be beneficial to our stockholders, and may prevent attempts by our stockholders to replace or remove our current management. These provisions include:

- authorizing the issuance of “blank check” preferred stock, the terms of which may be established and shares of which may be issued without stockholder approval;
- limiting the removal of directors by the stockholders;
- creating a staggered board of directors;
- prohibiting stockholder action by written consent, thereby requiring all stockholder actions to be taken at a meeting of our stockholders;
- eliminating the ability of stockholders to call a special meeting of stockholders; and
- establishing advance notice requirements for nominations for election to the board of directors or for proposing matters that can be acted upon at stockholder meetings.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management. In addition, we are subject to Section 203 of the Delaware General Corporation Law, which generally prohibits a Delaware corporation from engaging in any of a broad range of business combinations with an interested stockholder of such corporation for a period of three years following the date on which the stockholder became an interested stockholder, unless such transactions are approved by our board of directors. This provision could have the effect of delaying or preventing a change of control, whether or not it is desired by or beneficial to our stockholders. Further, other provisions of Delaware law may also discourage, delay or prevent someone from acquiring us or merging with us.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Recent sales of Unregistered Securities

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES
None.

ITEM 4. MINE SAFETY DISCLOSURES
Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

Exhibit number	Description of document
3.1[(1)]	Amended and Restated Certificate of Incorporation of the Registrant.
3.2[(1)]	Amended and Restated Bylaws of the Registrant.
4.1[(2)]	Form of Common Stock Certificate of the Registrant.
4.2[(3)]	Indenture, dated May 2, 2017, by and between the Registrant and Wells Fargo Bank, National Association, as trustee.
4.3[(3)]	Form of Note representing the Registrant's 3.375% Convertible Senior Notes due 2024 (included as Exhibit A to the Indenture filed as Exhibit 4.4).
10.1[(4)]	Offer Letter, dated February 15, 2017 and as amended July 19, 2017, between the Registrant and Yamo Deniz, M.D.
10.2[(5)]	Flexion Therapeutics, Inc. 2013 Equity Incentive Plan, as amended, and Forms of Stock Option Agreement, Notice of Exercise and Stock Option Grant Notice thereunder.
31.1	Certification of the Principal Executive Officer and Principal Financial Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934.
32.1	Certification of the Principal Executive Officer and Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

(1) Incorporated by reference to the Registrant's Current Report on Form 8-K, filed with the SEC on February 19, 2014.
(2) Incorporated by reference to the Registrant's Registration Statement on Form S-1 (File No. 333-193233), as amended.
(3) Incorporated by reference to the Registrant's Current Report on Form 8-K, filed with the SEC on May 2, 2017.

(4) Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2017, filed with the SEC on August 8, 2017.

(5) Incorporated by reference to the Registrant's Current Report on Form 8-K, filed with the SEC on September 14, 2017.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Flexion Therapeutics, Inc.

Date: November 6, 2017 By: /s/ Michael D. Clayman
Michael D. Clayman
Chief Executive Officer
(Principal Financial Officer)